



Electrical Merchandising

The Monthly Magazine of the Electrical Trade

April
1917

In This Issue:

War-Work for You

**More Ways to
Win Housewiring**

**A Dealer's
Inventory of
Stock and Profits**

**How
Negro Servants
Helped Sell
Electric Ranges**

**Taking the
Mystery Out
of "Overhead"**

**Lighting Sales
and Methods**

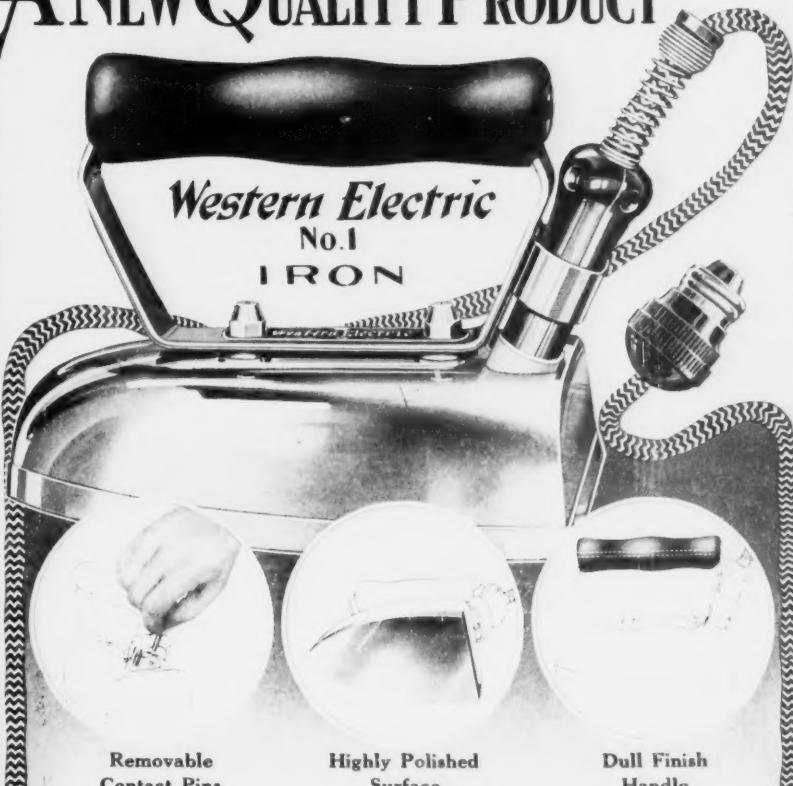
**Show Windows
and Store Ideas**

**Money-Making
Pointers for the
Dealer Manufacturer
Contractor Jobber
and Salesman**

20c a Copy

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220 W. 36th St., New York

A NEW QUALITY PRODUCT



These Three Features
and the new black-and-white cord that repre-
sents a distinct achievement will sell this
iron on sight.

The Price is \$5.00 — The Weight is 6½ lbs.

Let us tell you why it will
pay you to sell this new iron

Western Electric Company
INCORPORATED



Waiting for you to tap its Greater Comforts and Convenience

The electric socket on your wall is just a gateway through which you can get not only MORE and BETTER LIGHT, but the many other electric conveniences and economies afforded by science and progress.

One key to all that lies behind the socket is the lamp you use. What you get from the socket depends upon the kind of lamp you use.

You can't afford to use old-style CARBON LAMPS. Without any doubt in your mind, however, you can, with EDISON MAZDA, make your electric

current do three times as fast as with carbon lamps. Since the economy of each individual is aided by the number of lamps you use, the more lamps you use, the more money you save when you put an EDISON MAZDA in every room.

It's time you started to make the most of your time to have it done. In the savings locations, special house-wiring rates are available. Call in your electrician, get him to wire and show you how simply it is done.

EDISON MAZDA LAMP

WATCH
THE MAGAZINES

This Spring's house-wiring messages are reaching millions of people.

Advertising is a fundamental part of the Edison MAZDA Lamp business, just as manufacturing is.

Manufacturing produces the lamps. Advertising develops the market.

Both help to produce the satisfaction of Edison Lamp users.

Both serve the consumer and the whole electrical industry.

Why not make Edison MAZDA advertising a fundamental part of your business?

Don't miss the valuable suggestions in your copy of the Edison Sales Builder (House-wiring-Number).

EDISON LAMP WORKS

of General Electric Company
Harrison, N. J.

6902

—to make the low cost
of Electric Light
still lower

THE purchasing power of the dollar spent for electric current was never so large as it is today. Economy makes such dollar buy all the light it can. Edison MAZDA Lamps are the most economical lamps ever made. They are simple enough for wiring the old house, the old store, the old factory.

The key for wiring is soon paid for by the saving made on the purchase of the Edison MAZDA Lamp. The Edison MAZDA Lamp is a true symbol of progress in electrical science. Think of the light it gives, the warmth it gives, the light it gives.

An Edison MAZDA Lamp is more than an electric lamp. The Edison MAZDA Lamp is a true symbol of progress in electrical science. Think of the light it gives, the warmth it gives, the light it gives.

EDISON LAMP WORKS of General Electric Co., Harrison, N. J.

IN MAZDA LAMPS
.A. and backed by MAZDA Service

Electric Light finds its welcome way into practically every new building.

The modern magic maker—electric current—is always put outside, waiting to be admitted.

And old wall, however ancient, surely might not be let in to share the bright, white light of Edison MAZDA Lamps.

Let a m! Wait the old house. Wait the old place of business. Wait the outside stable where you keep your Packard. Wait the vacant house or store where you keep your new.

Electric wiring means much, but it doesn't cost much. In addition to modern, clear, cool, matchless lighting, it opens the way for many of those other electric conveniences and comforts which were first luxury, but now necessity.

Edison MAZDA Lamps, because of their three fold economy, make the most of the electric current you can now get so reasonably, they make electric lighting a pleasure to have. They give three times as much light as the old-style carbon lamps at no additional cost for current.

In their steady brilliance Edison MAZDA Lamps are the most reliable lamps ever made by the General Electric Company in its countless efforts to make electricity the indispensable servant of every modern man, woman and child.

Ask your lighting dealer.

EDISON LAMP WORKS
of General Electric Company

General Offices, Harrison, N. J. Agents Everywhere

MAZDA LAMPS
and backed by MAZDA Service



F. M. FEIKER, Editorial Director

O. H. CALDWELL, Editor

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Go to the N. E. L. A. at Atlantic City, May 28—June 1

BY all the signs of the electrical almanac the assembly of central station legions at Atlantic City next month is going to outrank in interest and importance even the splendid sessions of past years. The program for the week is overflowing with valuable reports and papers covering a great range of timely subjects. But to us most significant of all in the widening influence of the national association is the growth of that lusty six-year-old, the Commercial Section, outstripping as it has even the vigorous progress of the parent body.

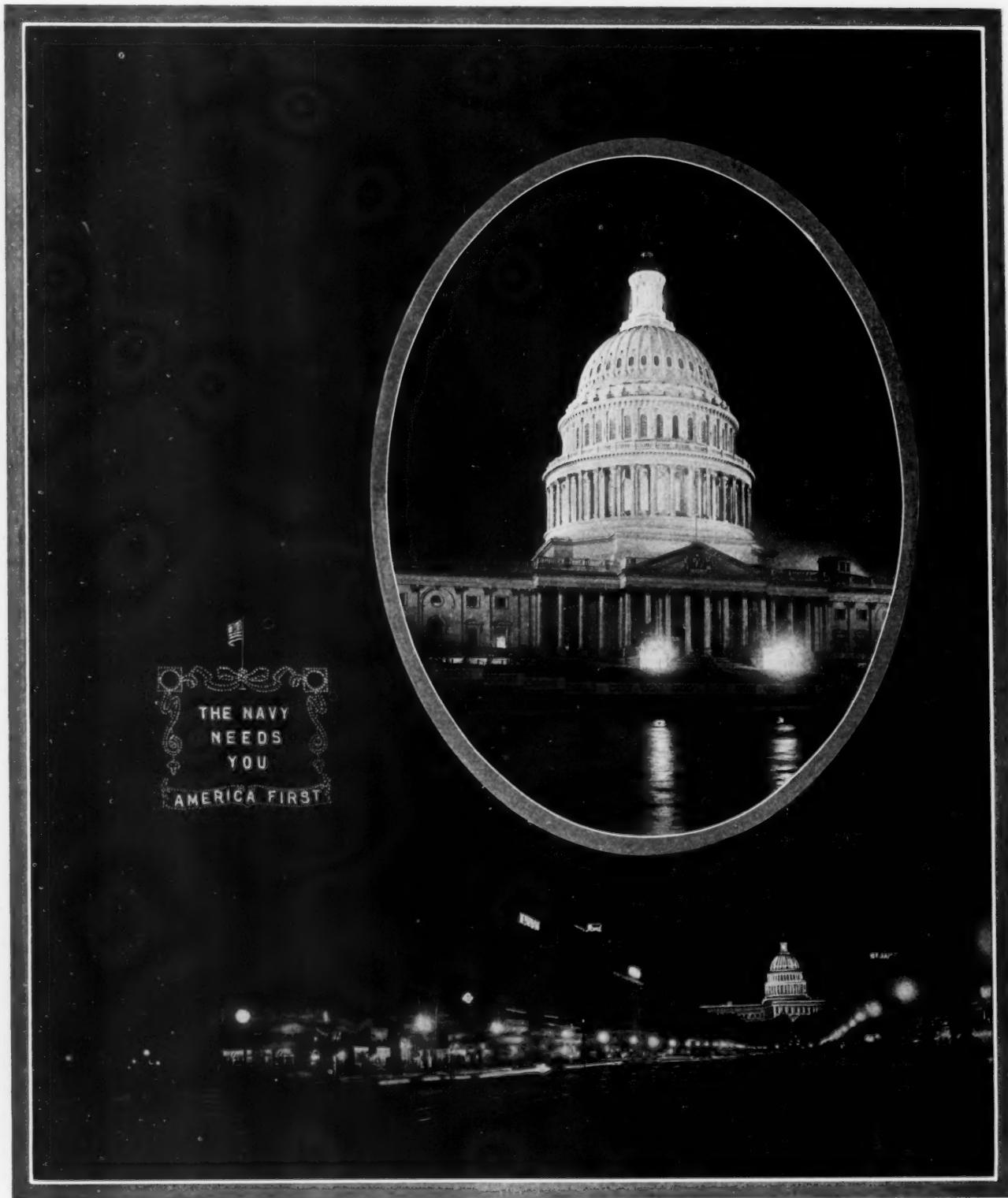
One branch of the Commercial Section alone will this year offer more reports and data than the whole Section has in previous years, while each of the other Commercial branches is similarly widening its usefulness as well as membership. This year, too, the manufacturers have contracted for double the display space ever taken before. And the practical and instructive exhibit of the lamp committee will alone be worth any electrical man's visit to Atlantic City.

Every commercial man who can should go, and gather with the delegates outside as well as in the sessions—for the spirit of the industry walks abroad at times like these. And any man or manager who will catch the enthusiasm and purpose of this great commercial body, is bound to come away discovering in himself new powers and new faculties which can and should be energetically applied to the job back home!

Never Mind the Calendar

OF course the calendar says that "Wire-Your-Home Time" is nearly half over, but after all what does that matter? If the house-wiring going is good no man need hesitate to keep on keepin' on. So we have included in this issue some more ideas on how to win and wire the house, and stories of some mighty interesting house-wiring experiences. Make use of them.

Of This Number of ELECTRICAL MERCHANDISING 11,000 Copies Are Issued
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The Capitol at Washington Flood-Lighted

The recent movement to flood-light town halls, county buildings, state houses and other public structures—which is here seen culminated in the superb illumination of the federal Capitol itself—has already shown the public in many communities how very practically this same flood-lighting can be adapted for the policing and protection of public structures in these days of war.

For the Inauguration lighting of the Capitol, above pictured, eighty-four 400-watt projectors, grouped in four banks of twenty-one each, are mounted on the House and Senate wings of the structure. This projector equipment was installed under the direction of Elliott Wood, superintendent of grounds and buildings, from plans prepared by the engineering department of the Edison Lamp Works, Harrison, N. J.

The vista of Pennsylvania Avenue, Washington, with the Capitol dome in the distance (copyright, 1917, Amer. Press Assn.) shows at the left the big electric sign of the Potomac Electric Power Company which during recent weeks has carried a succession of inspired patriotic messages in the space beneath the flood-lighted flag.

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Electrical Merchandising

The Monthly Magazine of the Electrical Trade

With which is incorporated ELECTRICAL MERCHANDISE

Volume 17

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Number 4

Mobilize Yourself

IT IS THE PRIVILEGE AND DUTY of every man in the electrical trades now to serve the nation.

We are entered upon a war of materials. Each reader of this page, each worker in the industries for which these pages stand, can serve in some capacity the industrial army upon which quick peace depends. And none should await conscription to this army. It is no time for thumb-twiddling.

There are peculiar opportunities for service open to the readers of ELECTRICAL MERCHANDISING. Electrical contractors and the commercial men of the central station industry can do as much as any single group in America to speed up the production of munitions and supplies.

By the skillful lighting of workrooms and machines, they can add an amazing percentage to the industrial output. By clever and resourceful applications of motors they can release for other and more needful service many thousands of men who now perform machine-like operations. By studying the availability of industrial electric heat they can aid substantially in the conservation of the nation's fuel.

Such service is real service: the fact that it is performed without bands, flags and mili-

tary formalities removes nothing of its dignity and necessity.

One specific thing which electrical men can do at once is to install lighting equipment for the policing of munitions factories, public buildings, power houses, armories and public works. There is a grave danger from enemies within the country—perhaps it would be truer to call them fanatics—whose zeal may lead them to attempt destruction. In meeting such danger, no agency equals light. The dynamiter and the man bent upon arson work only in the dark. A zone of brilliant light about all buildings of public value will prove better protection than cordons of guards. And every flood-lighting unit equals a man: therefore, every unit so installed releases a man for more productive service.

Service of the sort we have indicated is not directly sought by the government. There are as yet no recruiting stations for the army of industrial efficiency. Everyone who thus serves must do so voluntarily: more, he must make his own opportunity for service, must arm and equip himself with the knowledge of his trade, and must plan his own campaign.

It is work which is very well worth doing in peace time. In the face of war it is the electrical man's simple duty.

Mobilize yourself.

How Elmira Solved the House-Wiring Problem

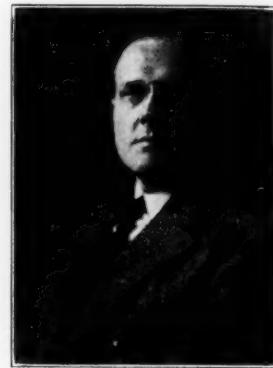
The Central Station Company Won 1500 New Customers While the Electrical Contractor Turned His Capital Each Month

By EARL E. WHITEHORNE



ROBERT W. HOY
Commercial Manager

AN INTERESTING THING has happened in Elmira, up in New York State. Last year the central station and one contractor working in co-operation carried on an intensive house-wiring campaign that lasted nine months, and produced 1500 new customers in a city of 40,000. The other local contractors went in on it at the beginning, but later dropped out. Why this was and how the campaign was effected, makes a story that is a valuable contribution to the general experience in co-operative wiring campaigns. It comes first-hand from the men who were concerned in it, and are about to launch a second campaign with practically no changes in conditions. There's proof enough of satisfaction.—THE EDITOR.



FREDERIC H. HILL
General Manager

ALMOST ten years ago, when people first began to talk and write about the local selling side of this electrical business I remember hearing about an incident that happened in Elmira. The Elmira Water, Light & Railroad Company possessed one salesman whose duty it was to spread the electric gospel through the city and develop all the business to be had in both the fields of lighting and power. And this salesman had so many records to keep up, and forms to fill out, and reports to make to the main office in New York, that it required a couple of hours of his time each day. So he hit upon a scheme that seemed to offer hope. He let the inside work slide for four days and then reported for the sixth day: "Too busy to do any work. Took all day to make out these reports." Whereupon the Big Boss down in Wall Street woke up, swept the red tape out and dumped it in the ash can, and the sales department in Elmira had a chance to get some business.

I couldn't help thinking of this the other morning when I dropped off the sleeper in Elmira, got a bite of breakfast, and turned up at 8.15 to sit in at the morning meeting with which Commercial Manager Robert W. Hoy starts off the working day for the seven salesmen who keep busy in Elmira now.

Last year they closed 1500 house-wiring contracts in this town, and piled up 4899 hp. in additional motor load, an increase of 49 per cent, to say nothing of a flock of signs, a

goodly bulk of other lighting business, a bunch of vehicles, some 1100 irons (a jump of 175 per cent), and the Lord knows how many appliances. Here were seven regular fellows on a Saturday morning turning in reports of business cleaned up on the day before, receiving their instructions for the hours ahead, and getting things lined up to start another wiring campaign in a city that by all the rules had been sucked dry a few short months ago—and the same town that, a little back, had been thought to offer opportunity for but one man. Truly, the times have changed. And while the salesmen worked, Hoy and his general manager, Frederick H. Hill, good-naturedly put in the day with me and told me all about that wiring campaign and lots of other things.

A WIRING CAMPAIGN NEEDED

Here was the situation in a nutshell. Elmira, grown to be a city of 40,000, lies in the center of a prosperous farming section of New York State, and boasts a number of large manufacturing industries that in the last few years have grown extremely fast and put a premium on dwellings. Almost any kind of a house will rent. Landlords are not forced to coddle tenants, and the town was full of unwired houses, just as almost every other town is full of them. The Elmira Water, Light & Railroad Company had not been idle, however. An excess-indicator campaign a few years ago had connected up a lot of them on a flat rate, and most of these have since been

changed to meter customers. A so-called free-wiring offer had been featured once before and that had rounded up a large amount of business, but the ground was only scratched. And when Mr. Hoy came up from Harrisburg and took charge of the commercial department, just before the beginning of last year, he and Mr. Hill went to work at once to find a plan that would do two things—first make a whoop-it-up campaign to wire those waiting houses, and second by co-operation with the local contractors put in force a schedule and a standard for construction that would keep things coming permanently, and encourage every contractor to extend his business both in construction and in merchandising.

CONTRACTORS CALLED TOGETHER

There were only two men in the sales department then. Hoy at once began to gather in some more. He set the goal for 800 new houses, and sent out an invitation to all the contractors to meet at the office and decide on methods. They came, but they did not believe it could be done—not in Elmira. Then Hill suggested as a tentative arrangement this—that they should start a whirlwind wiring campaign in which the company should do the advertising, the soliciting for contracts, and the collecting of accounts, the contractors to wire the houses and bill the company for cash. Of course, in order to make such a plan adaptable it would be necessary to arrange a flat price per outlet schedule that

would make it possible for the salesmen to close contracts on the spot. He asked the contractors to talk it over and send in sealed offers naming the price each would be willing to agree to. But when these bids came in they were too high. They ranged all the way from \$4 to \$6 per outlet.

So they had another meeting all together, and Mr. Hill explained again the principles of a wiring campaign, and how, relieved of all the cost of selling and collecting, and assured of a steady volume of work, the contractor is able to figure closer than in ordinary business. Backed by the co-operation of the company, he explained, with cash payment for all work guaranteed, a monthly turnover of capital could be expected, and even a net profit of 10 per cent a month would pyramid to 120 per cent a year, a big return for any business. He therefore asked the contractor to authorize a schedule based on a flat price of \$2.50 per outlet up to ten outlets in standard concealed work, but not including fixtures, of course, and a flat price of \$2.25 per outlet on jobs where there were more than ten outlets. He told them of experience in other cities, and asked them to try it out for one month, and they all agreed, though not without misgivings. So the campaign started on April 1, with a standard fixture equipment offered as a side feature.

The company sent out an announcement postcard and ran ads in all the newspapers. They organized a crew of high-school boys, who distributed 15,000 house-wiring booklets for a wage of 50 cents per day and streetcar tickets. A bonus system was also instituted, which offered a commission of \$2 to any employee of the company (except the regular salesmen), as well as to any contractor's employee, who brought in a wiring job. And this feature was explained to everybody at a meeting held at Rohricks Glen, the summer park conducted by the street railway department.

He explained the purpose of the campaign and what it meant in added comfort and convenience to the people —how it was a *company* campaign in which each employee was interested and concerned. He told the linemen how at noon-time they could make a call or two and dig up prospects and make extra money. He told the stenographers that here were new hats and gloves for them for just a little

work among the neighbors in the evening. He put it not on the basis of cash commission, but suggested that here was a way to win a good vacation trip. How well it worked is proved by the fact that one young woman in the store received over \$100 in bonuses, and one of the Italian switchmen brought in new wiring business every week. If the employee could not sign up the prospect, a salesman went and closed the deal, and he was paid his bonus just the same. It worked. Each employee had a book with photographs and prices, and there was much rivalry between both indi-

one man turned in ten contracts that had not been touched. Hoy called another meeting and they all came, and most of them protested that they had not been making money. It was an interesting predicament.

They talked the situation over back and forth, and Hill and Hoy enumerated some of the reasons why their profits had not been larger.

It was pointed out that they had not organized for this campaign in their stockkeeping and supervision. Their men were waiting for a car to ride two blocks, instead of walking. Wagons were being sent to haul



These pictures show the wide diversity in the types of houses wired during the Elmira (N. Y.) campaign—ranging from very old to very new, from the old residence section to the new suburbs

viduals and departments, and the whole big family was united as it never had been before.

So the campaign got off with a rush. Every customer exercised his preference, if he had one, as to which contractor was to do his job, but there were always lots of jobs left to the company, and they were given out to the contractor who was in best shape to take care of them. Everybody was loaded with orders from the start, however, and so it went through the spring and summer and up to the first of October, when trouble started. One day a letter came signed by the contractors as a body, refusing to go on at the existing scale of prices, and

a stepladder around the corner, where a boy could have carried it more quickly. They were wasting the profit margin in poor management and blaming the lighting company for it. So finally Hoy called in all contracts and said that if the contractors would not do the work he would be forced to make good to the public and do the work himself. Then the next day came one of these contractors and brought his books and bank account to Hill and Hoy, and showed that he was making money and good money. He was *not* dissatisfied. He said, "I believe you're right, and that this trouble is the fault of the contractors themselves. My own experience proves it. I'll go ahead

and do my darnedest." Hoy turned over to him in a lump \$3,000 worth of wiring jobs, and he took on men until he had a force of twenty. By Christmas he had cleaned up \$7,000 in clear profit, for he had systematized his work and watched his jobs and held his costs down.

Later on, another contractor began to see the light, and he lined up his force and took hold once more, and he made money, too.

But the two co-operating contractors were soon snowed under with the work, so the Elmira company advertised for wiremen, and organized a force of three men and a helper, and relieved the contractors of the smaller contracts—among them a large num-

the cost. In all, 525 irons were issued this way. Then when the special open-work wiring offer was announced—a small skeleton installation for very small houses—with drop lights for \$12.50, there was a deluge of inquiries, for the public did not realize that it meant open work and drops. About fifty contracts were signed up for this, but when the work was actually done one-half of these were wired concealed at the regular campaign price. Also it brought out a large number of new prospects, who were followed up at once by the salesmen, and so developed much new business.

But mostly the contracts were just sold. About June 1, at a morning meeting, one of the salesmen said to

man on the job, in the day's work. Then, too, a special effort was made to impress upon landlords that electric light makes possible a better class of tenants and higher rent. This point was brought out in the newspaper ads and on the company's big changeable sign. One week it read, "Tenants—Demand Wired Houses"; and again, "Landlords—Why Don't You Wire Your Homes?" This line of argument produced a lot of business.

So, whereas Hoy had set the goal to wire 800 houses, they actually wired up 1500 houses, and the sale of fixtures and appliances that this induced has made a year of big prosperity among the electrical fraternity in Elmira. And the business keeps up well. More houses are being wired up now each month than ever were before the campaign. Each morning the newspapers are scanned for "to let" ads, and a salesman calls upon the owner, if it is an unwired home, and shows him why it doesn't rent. And right now they are planning to repeat the campaign on the same terms, starting in the spring and running through the year. They reason that if it worked so well in 1916 it is worth another try. But to me the thing most interesting is the plain demonstration of the contractor's function in a campaign like this one.

WHAT CONTRACTOR TURNER SAYS

I called with Hoy, and talked a while with Turner of the Turner Electric Company, the man who stuck and made good money on the campaign. He testified enthusiastically to the soundness of the flat-price campaign plan, and said that all the contractor must do is put a force of men on and "saw wood." It needs a good free-working system and some supervision and some "pep." But he found that from wiring jobs he was making 10 per cent net profit on his capital and turning it over every month, which was enough—and that in addition the fixture business was surprisingly productive. He said that 75 per cent of his customers purchased fixtures of the better class, and there was a ready market for appliances as jobs were done. He has been very busy ever since the campaign stopped, and is ready to help start another.

And there you are—the contractor who will get right down to campaign methods, and play the game, can cash in on the profits, just as Turner did.

FREE THIS MONTH
A \$3.50
ELECTRIC
IRON
With every old house wiring contract
for 5 rooms or more.

5 Rooms
\$12.50
Everything ready to turn on the lights.
Additional rooms on same basis.

NEVER COST SO LITTLE
Don't go into another winter without
electricity when you can get it at such a
small cost. Do not delay until too late.
The month only.

Elmira Water, Light & R. R. Co.

If You Do Not
Wire for
Electricity
This Month, You Lose
To go into another winter without
wiring your house means far more than
the terrible inconvenience of it. It
means money loss to you.

5 ROOMS
\$12.50
All ready to turn on the light, addi-
tional rooms in proportion.
\$3.50 ELECTRIC IRON FREE
With every old house contract during
September if for 5 rooms or more.

ELMIRA WATER, LIGHT & R. R. CO.

Only 3 Days More
To Obtain An
ELECTRIC
IRON FREE
Our unusual offer closes with Sep-
tember. Any application or request for
an estimate made this week will be re-
garded under this offer to give a \$3.50
Electric Iron with every house wiring
contract. (For an old house).

5 ROOMS WIRED
for **\$12.50**
Includes everything ready to turn on
the lights. Place the order now, before
it is too late to profit by this extraordinary
offer, which never has been equalled any-
where.
Elmira Water, Light & R. R. Co.

Last Call
About 300 Elmira owners of old
houses have taken advantage of our ex-
traordinary September house-wiring offer.
Why Not You?
There is one day remaining to
obtain a
\$3.50 Electric Iron
Free
Investigate the September offer which
closes Saturday night. Make your ap-
plication before Saturday noon.
5 ROOMS WIRED
for **\$12.50**
More in the same proportion. You
may arrange to take 10 months to pay.
This price includes wiring, fixtures,
Everything ready to turn on the lights.
Elmira Water, Light & R. R. Co.

The newspapers were depended upon almost exclusively in advertising this campaign offer, and very little more than normal space was used

ber of \$12 open-wiring jobs in small houses of foreigners. This relieved the situation considerably. And so it went until December, when the campaign slackened with the coming of the Christmas shopping season. The record for the year in wiring contracts was as follows:

January	17	June	142	November	190
February	19	July	91	December	76
March	39	August	104		
April	140	September	299		
May	131	October	254		1502

All this time the selling had been done entirely by the salesmen of the Elmira lighting company. Each man worked in his regular territory day after day, and in the main held to the straight campaign proposition. Beginning in August, an electric flat-iron was offered as a premium free with every contract, and 5 per cent was added to the fixture bill to cover

Hoy: "I want a chance at a new territory. I have gotten all the business that I seem to be able to." Hoy asked, "Does anybody else feel the same way?" They did. But Hoy said, "What you fellows need is not new territories, but a few brand-new ideas. Let's dig 'em out."

So he delegated several men to play the part of salesmen and the rest as prospects, and he started a demonstration there that spread out all the arguments and freshened up each salesman's wits, and they went back to the job and systematically rang doorbells and dug up more good new prospects by the score. If some salesman found that he absolutely could not land a man who still looked like a logical prospect he reported the case, and Hoy sent out some other man to try his luck, and often it cracked the nut. But mainly the sales were made by the



Types of small dwellings reached with the Muncie plan of selling house wiring

GOING AFTER THE FINAL FORTY PER CENT

A House-wiring Campaign at Muncie, Ind., Which Is Driving at the Saturation Point of One Meter per 4.3 Inhabitants Established by a Careful Census of Possible Residence Business

By R. THURMAN

Manager New-Business Department, Muncie Electric Light Company

A SALES policy which recognizes several important and hitherto much neglected facts is in force with the Muncie (Ind.) Electric Light Company. This policy recognizes that gross revenue must be increased by an intensified drive for lighting customers principally on existing lines; that the popular idea of the cost of wiring has been gained from the knowledge that well-to-do present customers paid \$50 or more to prepare their homes for electric service, as well as from a lack of knowledge that cheaper construction is available; that educational work is required to discount this popular idea and instill a definite knowledge of how little electric wiring and electric service really costs; that the revenue derived from a customer does not depend on the quality of his fixtures and may be as great with drop cords as with expensive equipment; and that a selling campaign to be effective in a fairly well saturated city must appeal to the man whose salary is from \$12 to \$20 per week. For it is he who constitutes the final 40 per cent.

ONE MAN TOOK COMPLETE ELECTRICAL CENSUS IN SIX WEEKS

Furthermore, such a campaign, to be successful, must meet two conditions. It must acquaint the occupant of each unwired house with a knowledge of the exact minimum cost of

wiring his particular residence; and it must provide for distributing payments over a long period.

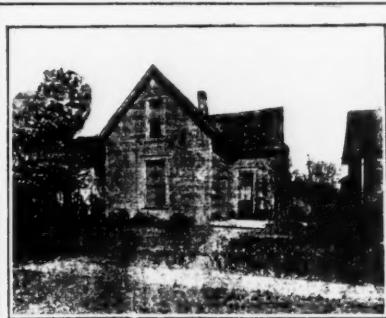
The first step in this sort of a campaign at Muncie was a census of every unwired house in the city and suburbs. This was taken by one man and re-

quired approximately six weeks to complete. In order to save time, the census-taker was instructed to get only the information needed, and not to spend time in talking wiring. He secured the name of the tenant of each house, address of the house, name and address of the owner, and number of rooms. These data were taken on a separate card for each house; later they were typewritten on other cards for filing, pink ones denoting home owners; white showing tenant houses.

Card No. 1 (pink) indicates that the house at 927 S. Beacon Street is occupied and owned by Oliver Brown and has five rooms. The "L" in the upper right-hand corner explains that a line is necessary before this house can be connected. Card No. 2 (white) is for the house at 1114 East Adams Street and shows us that it is occupied by James Oliver, has six rooms, and is owned by Mrs. Arthur Smith, who lives at 405 North Elm Street, this city. The "S" in the corner means that service is available to connect this residence.

These cards are filed according to streets and numbers and ample space is left for notes regarding the prospect's progress toward a favorable decision. When a house is wired the card is removed from the file, thereby giving us, at any time, a record of every unwired house in the city.

When the data were tabulated we



Residence of Mr. and Mrs. Mihren L. Huckleberry, 1502 W. 13th St.

WIRED FOR ELECTRIC SERVICE

Mr. Huckleberry has just had his home wired and connected for electric service. He says:

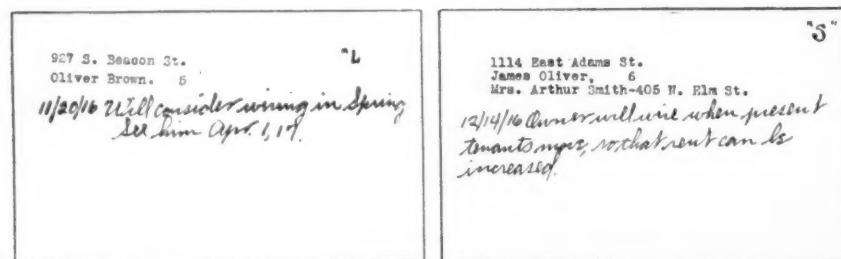
"My eyes are in bad shape for reading and the bright, steady electric light gives reading comfort that I never had before. I am also very much pleased with the careful, clean and efficient way my home was wired."

This Is Only One of 132 Homes Connected Last Month. Let Us Wire Your Home Now.

A house of four rooms like the one shown above can be wired for \$2.10 cash and 70 cents per month for 12 months. Phone 616 and let us wire Your house.

MUNCIE ELECTRIC LIGHT CO.

Letters from satisfied housewiring customers were reproduced in newspaper "ads"



Typical cards selected from the "Electrical Census" file

were surprised to find that we had more unwired houses than we had thought possible, and that the theoretical saturation point in Muncie is one residence customer to 4.3 inhabitants, instead of the commonly accepted standard of one to five.

WHAT THE ELECTRICAL CENSUS SHOWED AT MUNCIE

Our census was completed on Sept. 30, 1916, and on that date Muncie electrically was in this condition:

Population of Muncie and suburbs.	33,975
Number of residences.	7,852
Total number of consumers.	5,441
Number of power users.	207
Number of commercial consumers.	586
Number of residence consumers.	4,648
Number of wire residences.	4,832
Number of unwired residences.	3,020
Per cent of residences wired.	61.5
Per cent of residences using electric service.	60.0
Per cent of residences not using service, approximately.	40
Saturation or number of inhabitants per customer.	6.2
Residence saturation or number of inhabitants per residence customer	7.2
100 per cent residence saturation would equal a ratio of consumers to inhabitants as one is to.	4.3
Cost to wire 1045 owners' houses.	\$17,538.70
Cost to wire 1975 rented houses.	\$30,030.85
Cost to wire all unwired houses (3020).	\$47,569.55
Increased yearly revenue if 3020 prospective customers average \$15 each.	\$45,400.00

An analysis of the census data also

showed what a preponderance of four, five and six-room houses there were among those unwired. These data were tabulated as follows and bore out the thought that the campaign must be directed at the poor man, the dweller in the small house:

UNWIRED HOUSES			
Number of Rooms	Home Owners	Rented Houses	Total
2	4	5	9
3	45	165	210
4	130	459	589
5	363	767	1130
6	193	331	524
7	138	137	275
8	114	74	188
9	32	20	52
10	18	9	27
11	4	2	6
12	2	2	4
13	1	1	2
14	1	1	2
15	0	1	1
16	0	0	0
17	0	1	1
Total.	1045	1975	3020

HOW TO CAPITALIZE THE INFORMATION DISCLOSED

Having obtained this information, letters were multigraphed on which space was left to fill in the size of house, the first payment and the

DEFERRED-PAYMENT WIRING PLAN—PRICE SCHEDULE

	Contractor's Price	Customer's Price	Cash Payment	12 Monthly Payments
Two outlets.	\$8.60	\$9.45	\$1.89	\$0.63
Three outlets.	9.75	10.70	2.14	.72
Four outlets.	11.50	12.65	2.53	.85
Five outlets.	13.45	14.80	2.96	.99
Six outlets.	15.95	17.50	3.50	1.17
Seven outlets.	17.50	19.25	3.85	1.29
Eight outlets.	19.50	21.45	4.29	1.43
Nine outlets.	21.25	23.30	4.66	1.56
All over nine outlets, each.	1.75	1.90	...	...
Single-pole snap switch.	1.40	1.55	...	...
Single-pole flush switch.	1.90	2.10	...	...
Cellar outlet with snap switch.	2.40	2.65	...	...
Porch outlet with snap switch.	2.40	2.65	...	...
Porch outlet with flush switch.	2.60	2.85	...	...
Three-point snap switch.	5.40	5.95	...	...
Three-point flush switch.	6.00	6.60	...	...

NOTE.—The contractor should always quote the price given under heading "Customer's Price," whether the job is to be taken on deferred payment or for cash.

A wiring schedule on which the customer pays something like \$2.96 down and \$0.99 a month and on which the contractor at the same time receives from \$4.30 to \$1.75 per outlet for his work, depending on the size of the house. It sounds good to both sides.

monthly payments required for wiring. In this way every occupant of an unwired house in the city received a letter addressed to him personally, giving the exact cost of wiring. Two different types of letters were sent out, letter No. 1 to "Home Owners" and letter No. 2 to people living in rented houses. The response to these letters exceeded our expectations. In fact, some of our prospects, living off our lines, were so enthusiastic that it was difficult to convince them we could not get to them at this time.

During the four months following the mailing of the letters, the net gain in consumers amounted to 619, an average of 154 per month. We are

Order No. 568

Customer: Blank Electric Co.

AGREEMENT FOR WIRING AND FIXTURES

This agreement, made and entered into this 22 day of Sept. 1916 between the Muncie Electric Light Co. and R. L. Smith, hereinafter called the Company, and of Muncie, hereinafter called the Purchaser. Witnesseth, That the Company agrees to wire and furnish the wiring and fixtures as specified below for one frame house located at No. 420 N. Elm in the City of Muncie, Ind. for the sum of \$19.05

Payments to be made on the following schedule:

1. \$1.27 each, or before the 10th day of each month, the purchaser to have the privilege of paying at any time, in cash the balance then due hereunder.

Whenever any of the foregoing installments shall be in arrears for a period of fifteen days, or upon violation by the purchaser of any of the terms and conditions of this agreement, the whole balance then unpaid shall become immediately due and payable. The Company shall have the right to cut off the supply of electric current and remove said wiring and fixtures, without any liability therefore.

The signature of the company constitutes any previous written or verbal agreement other than written.

Signature: R. L. Smith
Street and No. 420 N. Elm
City: Muncie Ind.
Witness: Kenneth Wilson

This contract shall not be binding upon the Company until accepted by its proper executive officer.

Accepted this 22nd day of Sept. 1916

MUNCIE ELECTRIC LIGHT CO.
By: R. L. Smith

Order No. 568

HOUSE WIRING CONTRACT

We hereby agree to wire for and install 6 outlets and 1 snap switch for the Muncie Electric Light Company in house owned by R. L. Smith located at No. 420 N. Elm in the City of Muncie Ind. as specified below for the sum of \$17.35

Outlets Concessed Work

ROOM	OUTLETS	OUTLETS	OUTLETS	OUTLETS
Parlor	✓	✓	✓	✓
Sitting Room	✓	✓	✓	✓
Dining Room	✓	✓	✓	✓
Kitchen	✓	✓	✓	✓
Front Hall	✓	✓	✓	✓
Porch	✓	✓	✓	✓
Upper Hall	✓	✓	✓	✓
Bath Room	✓	✓	✓	✓
Bed Room	✓	✓	✓	✓
Bed Room	✓	✓	✓	✓
Bed Room	✓	✓	✓	✓
Cellar Outlet	✓	✓	✓	✓

It is understood by the contractor that no changes in this contract will be allowed by the Company unless notice is given in writing.

MUNCIE ELECTRIC LIGHT COMPANY
By: R. L. Smith

We accept above contract and conditions as set forth
Blank Electric Co.

Sample contracts between the customer and the central station and the electrical contractor and the central station

Letter No. 1 to Home Owners

Dear Friend:

Do you know that you can introduce electric service in your home for an initial payment of \$2.96 with further payments of \$0.99 monthly, distributed over a period of twelve months?

Such an opportunity is presented to you in the Deferred Payment Plan—a most simple and economical method of wiring already-built houses.

The payments as given above cover one outlet in each of your five rooms and include drop cords, sockets, entrance switch, also city inspector's fee, in fact give you a complete electric installation, except the bulbs.

Electric service is so universally used in every phase of every day life that you are undoubtedly acquainted with the comfort, convenience and economy derived from its use. Just remember that every dollar spent in wiring your home will increase its value several times that amount.

While the cost of every other necessity has gone up by leaps and bounds during the last few years, electric service has decreased. The residence rate is now 7½ cents per kilowatt-hour and the monthly minimum is 50 cents.

We connected up 132 new customers last month and we invite you to be one of the 200 who will this month, for the first time, enjoy electric service.

Just step to the nearest 'phone, call 616 and give your name and address. One of our representatives will call and take care of your electrical needs.

Yours very truly,
R. THURMAN,
New-Business Manager.

Letters that tell in a friendly spirit and a few one-syllable words a lot about wiring and electric service

still having calls as a result of this mail campaign and believe that it will continue to draw business for some time to come. The most gratifying feature is the large number of rented houses that are being wired. Many tenants evidently took our advice. Since they had definite figures to quote, the landlord could not put them off with the objection that it cost too much.

We have no wiring department, but turn all work over to five reliable contractors. They are given wiring jobs in turn, regardless of the amount of the contract.

A very simple price schedule is adhered to by both company and contractors. With our "Deferred Payment Plan" the contractor is paid approximately 10 per cent less than we receive, but his bill is paid as soon as the work is done, while we collect 20 per cent from the customer when the contract is signed, and the remainder in twelve equal monthly payments. All cash propositions are taken directly by the contractor at our "customer's price" (see schedule). The 10 per cent retained by the company covers the cost of handling the account, and more than makes up the loss from bad accounts. As contracts are taken only from home owners, our losses are very small.

At the time these plans went into

Letter No. 2 to Renters

Dear Friend:

Do you know that the house in which you live can be wired for an initial payment of \$2.53 and further payments of \$0.85 monthly, distributed over a period of twelve months?

Such an opportunity is available to your landlord through our Deferred Payment Wiring Plan.

Electric service is so universally used that it is not necessary to call your attention to the comfort, convenience, cleanliness and economy derived from its use. With the present low rate of 7½ cents per kilowatt-hour and monthly minimum of 50 cents you would surely use it if the house were wired.

Call your landlord's attention to the above wiring price. Tell him this covers one outlet in each of the four rooms and includes everything (drop cords, sockets, entrance switch, city inspector's fee, etc.) except bulbs. Show him that wiring is an investment, not an expense, that every dollar spent in wiring adds several dollars to the house value. Advise him that the electrically equipped house rents quicker and sells at a higher price.

Tell him of the safety of Electric Service, no matches needed, no open flame. Remind him of its cleanliness, no smoke or soot to disfigure ceilings and walls. The cost of wiring is saved in a short time by lessened expense of papering and decorating.

Just 'phone 616 and give your name and address. One of our representatives will call and co-operate with you in getting your landlord to wire for Electric Service.

Yours very truly,
R. THURMAN,
New-Business Manager.

disconnecting the meter and returns the other end, filled out, to the new-business department. Whenever the meter is again installed the part attached to meter loop is sent in and the duplicate card is removed from the file. Every six weeks a salesman calls at all homes listed in the file to secure customers who have moved into vacant houses or whose circumstances have changed so that they can become consumers.

Methods similar to these outlined, modified to suit local conditions, are suited to any city. The cost of getting business by this plan is low. In putting it into effect central stations should remember that we are selling electricity, and the low-priced wiring job is better than none at all. The refinements will come later, giving the dealer his profit, permitting him to add to existing wiring and to sell appliances. As the result of our experience with the plan, we believe that co-operation among contractors, dealers and central stations, knowledge of true conditions and possibilities, definite plans to meet these conditions, and enthusiastic execution of the policy determined upon will eventually get us very close to that imaginary point—which we can approach but never reach—100 per cent saturation.

Lending Your Window to Uncle Sam



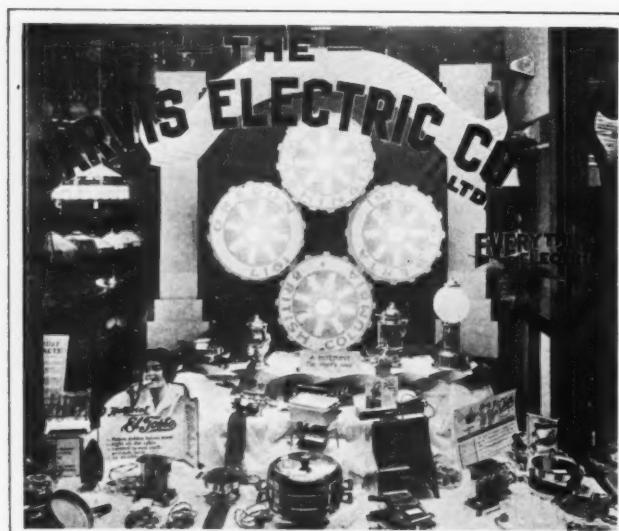
The United States Navy has 25,000 good jobs to be filled at once. You can help things along by using a patriotic window display, and here is a suggestion from the Navy Publicity Bureau. The recruiting station near you will be glad to help you with pictures and posters. Crepe paper and flags will do the rest. Flashlights, Mazda lamps, batteries and motors may be worked in with this idea very easily, while the combination of a flag on a pole and an electric fan will add motion with very little extra work.



In this "Wire-Your-Home Time" window, observe how one's attention is irresistibly drawn to the lithographed switch-plate and hand, and from there travels down to the various lamps and appliances on display.



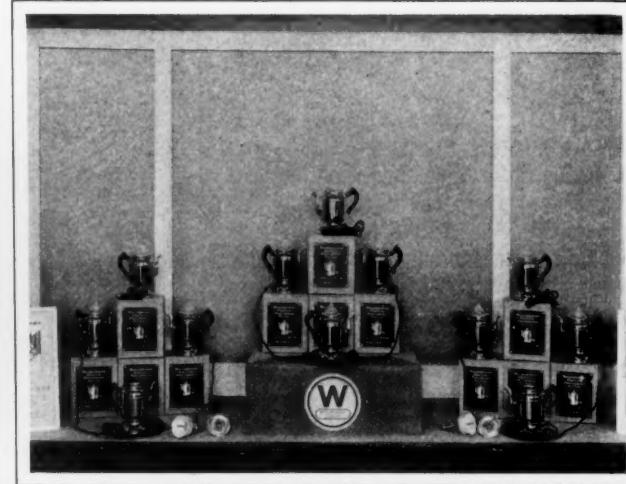
Plants and foliage always make the show window attractive. In this Carter Electric Company display at Atlanta, adequate window furniture—pedestals of various heights, brackets and tables—also make the window easy to trim.



Motion and light are the two prime attention-getters. In this prize-winning Rotarian Club window at Vancouver, B. C., the gear wheels rotated slowly, and marking the hub of each was a flashing tungsten lamp.



Live or even wax figures never fail to draw attention. The Rubin Company, electrical contractors, Charleston, S. C., won first prize in a local merchant's window contest with this display depicting an all-electric kitchen.



Sheer simplicity of treatment has its attention-getting value. Here is a window requiring only the cartons the percolators came in, and utilizing the shipping box, which, covered with brown paper, forms the central pedestal.

Getting Attention for

THE purpose of a successful window display is to sell goods—first, last and all the time. In doing this, it performs the same functions as the capable salesman and carries the prospective customer through the same selling steps—Attention, Interest, Desire, Purchase.

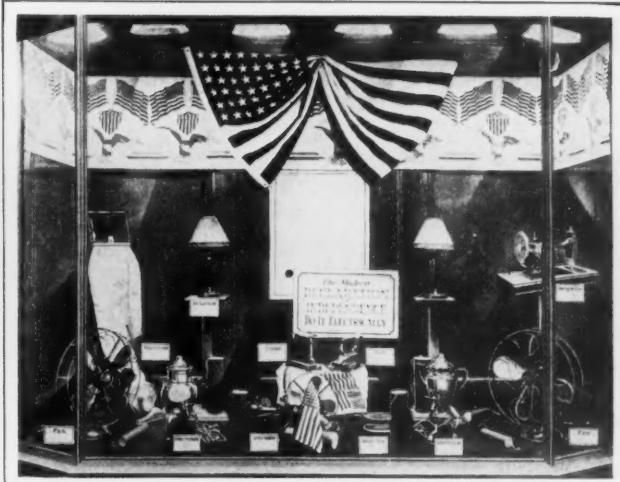
The best window displays, accordingly, are those having characteristics which will make the passer-by want the merchandise shown.

But to do this the display must first get his attention—must arrest his passing glance.

Hundreds of windows line every business street



An electric fountain in operation always adds a touch of life and color. Note also the use of softly lighted portables and growing-palm backgrounds in this Peachtree Street show window of the Hunnicutt Company, Atlanta.



"Show your flag" is good patriotism and also good window decoration. Here is a patriotic window with timely appeal recently set up in the Forty-fifth Street store of the Western Electric Company, New York City.

Your Appliance Window

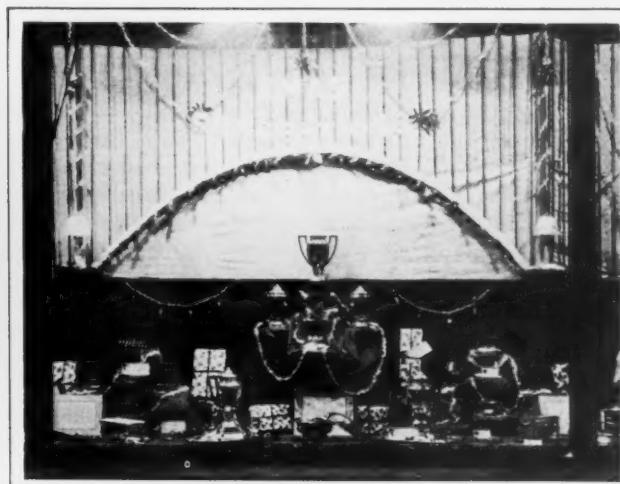
and unless there is some feature to catch the eye the display will receive little attention. People are, however, curious and anxious to see anything that strikes a new note. Hence, as shown on this page, attractive arrangements, touches of color, and decorative features such as flowers, flags, foliage, etc., all serve to give to the window the distinctive appearance that makes for attention. In this way, then, the decorative feature serves to arrest the attention and the attractive arrangement holds the attention and so assists the display in making sales.



"Bride" windows are always attractive and also effective in displaying electrical appliances. Coupled with the attention-value of the beautiful wax figure is closely "tied up" the gift idea, a very definite merchandise-moving appeal.



Let your window cards tell the selling story. The picture shows how at Danbury, Conn., the electric-light company supplemented the manufacturer's placards with original legends answering the prospect's question, "What does it cost to run?"



The background can be skillfully adapted to focus attention on the main feature of the display. This Oak Park (Ill.) window of the Public Service Company won first prize in the last Landers-Frary-Clark window contest.

COMPETITION OR CO-OPERATION?

Davis of the Brass Tack Brigade Discusses a New Plan for Helping the Electrical Dealers Increase Appliance Sales

By FRANK B. RAE, Jr.

LOOK who's here!" cried Big Jim Lenox, sticking his head into the private office where Davis and I were talking shop. "Ole Bug Hunter's in town."

"Fetch him in. Hello, Bug! Glad to see you. Sit down. Have a smoke? Everybody shake hands. By thunder, Bug, I am glad to see you," and Davis nearly shook an arm off the grizzled veteran who manages the lighting company down at Center City.

We all knew "Bug" Hunter. He is one of the old-school managers who had entered the electrical business by climbing a pole, and had fought, worked, studied and smiled his way to the management and then to the ownership of the neatest little lighting property in the state.

"What brings you here?" asked Davis when the cigars were lit. "Huntings bugs, as usual?"

"Looking for advice."

"What kind of advice? Tell me how you want to be advised and I'll advise you that way."

"Well, I'll tell you." Hunter puffed on his cigar for a minute. "I've about decided that I'm a back number. We haven't had any appliance policy worthy of the name. We sold a few hundred flatirons at cost some years ago, and we've got a little junk around the office that never works when we want to demonstrate it. Ike Freund, who runs the gents' furnishing business down in my town, got to kidding me about it and said I oughta hire his son to make a real business proposition out of our appliance salesroom. Ike's son would own the plant in a week if I hired him. But I got to thinking about it."

"It's worth thinking about," commented Davis. "We sold pretty close to \$16,000 worth of appliances last month."

"Yes, I know," answered Hunter, "but I'm a lighting man. I don't want to run a store; I want to run my plant. It's the best plant in the state. Why, men, that plant is the—"

"Yeah," cut in Lenox; "we know all that stuff, Bug. Don't tell us any more. You make juice for five hun-

dred and sixty-one one-thousandths of a cent at the busbar, and you can prove by graphics that the voltage hasn't varied one three-hundredth of 1 per cent in the last seven years and eight days, but—"

"Now, Jimmy, don't kid the old man. I come here to learn some of the stuff you youngsters are doing. I want to know something about merchandising. Moreover, I've got an idea."

that uses current. And then I'm going to hire a good clerk to tend that store. Customers come in and pick out what they want, and the clerk takes the order and the pay. Then he passes the order and the money along to whichever dealer the sale belongs to. What do you think of that?"

"How about prices?" asked Lenox. "Suppose one dealer puts in a flatiron at \$3 and another dealer puts in the



We went around to Snowden's place next. Snowden is not what you'd call a "screw-driver electrician," but his most enthusiastic apologist would not claim that he is a merchant. Nobody was in the store when we entered, but we heard someone shifting pipe in the cellar, so we stamped on the floor and pretty soon Snowden appeared through a trapdoor.

"Sew buttons on it," piped Micky Daly's voice from the doorway. "Ideas is precious, but elusive as a flea with th' St. Vitus dance."

"My idea," said Hunter, disregarding the little Irishman, "is this: I'm going to get a good store right down in Main Street. Then I'm going to fix it up and put in a bunch of tables and showcases. I'm going to loan one table and one showcase to each of the four contractors in the town so they can display their stuff—they can fill 'em up with anything they want to sell

same iron on the next counter at \$2.85?"

"Prices must be list. I've got that fixed. One of the reasons I went into this scheme is to keep the dealers from cutting each other's throats. They all complain they're not making money. By cracky, I'll find a way to make 'em make money."

"I tell you, Bug," suggested Davis. "let's go and call on a couple of contractors here in my town and see how they take to the scheme. Let's get the other fellow's point of view."

WHEN the plan was explained in detail to Abbott, the leading electrical merchant of the city, he shook his head.

"As far as I am concerned, if you came to me with any such proposition I'd say 'Thank you' and make use of the free display space. But in the back of my head would be the idea that you were simply using me to keep your display room stocked. The goods would be my goods. You wouldn't have any investment. It's a cheap scheme to enable you to put up a front without putting up any money."

"Cheap?" exploded Hunter. "Why, dammit, do you realize that I stand to invest \$6,000 in that store? I'm going to decorate it and fit it up swell and hire a good clerk and advertise and hire a window trimmer from the Emporium to keep the displays up to date, and a porter to sweep out, even a motorcycle boy to make hurry-up deliveries. I don't call that cheap."

"You asked me what I thought," replied Abbott curtly.

* * * *

WE went around to Snowden's place next. Snowden is not what you'd call a "screw driver electrician" but his most enthusiastic apologist would not claim that he is a merchant. Nobody was in the store when we entered, but we heard someone shifting pipe in the cellar so we stomped on the floor and pretty soon Snowden appeared through a trapdoor.

It was more difficult to explain to him what we wanted, but after a bit he seemed to grasp the idea.

"What is this?" he asked, "a scheme to give all the business in town to Abbott. He's hogging most of it now. In ten minutes he'd slip a little change to your salesman and then all the sales in the display room would go to him. I think it's a bum scheme."

"But don't you see, Mr. Snowden," explained Hunter, "you'd all be on an equal footing. You'd have as much display space as Abbott or anybody else. Your goods would have the same chance. If people wanted to buy your goods, they'd buy—no matter if you got all the sales in the place."

"Fat chance!" exclaimed Snowden.

* * * *

OLD man Hunter looked rather discouraged as we turned from Snowden's door and headed back to Davis's office.

"They don't seem to take kindly to

it," he said, "but I think I can convince the dealers back home that this is a good proposition."

"Well, I don't want to add anything to the discouragement, but here is one thing worth studying: You say you're going to spend \$6,000 on that store. That means that the proposition is going to cost you"—here Davis did some rough figuring on the back of an envelop—"it is going to cost you



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\$1,800 a year at least for interest, depreciation, clerk hire, window trimming and cleaning. At your low rate, that means that you've got to sell enough appliances to use up 30,000 kw.-hr. before you're even. Flatirons are the biggest current consumers in the average residence; you'd have to sell not less than 500 of 'em to get that consumption."

Hunter puffed away at the butt of his cigar. It certainly seemed that the bottom had been knocked out of his plan, yet he had not won his way to his present position by giving up an idea at the first breath of criticism. Finally he turned to Davis.

"But," he said, "there is nothing the matter with that idea except the fellows who will be benefited by it. I can solve the objection about a fair distribution of the orders. I can convince

men like Abbott that I am not trying to put anything over on 'em. I can solve the problem of investment and earnings. But, blame it all, I certainly do get discouraged trying to make these fellows meet me halfway in plans of mutual development.

"There are just three courses open to the electrical industry to-day: either the central station and the dealers must co-operate fairly and thoroughly, or they must compete, or they must lose the business through the competition of hardware stores, department stores, even 5-and-10-cent stores.

"Time was when the central stations were much opposed to having electrical goods sold by any but electrical dealers. They were afraid that a lot of junk would get on their lines and give the service a black eye. That fear is passing. The central stations know that they cannot prevent the druggist from selling 98 cent grills, nor the 5-and-10 from selling sockets at a dime. Also, they know that it doesn't make much difference who sells the stuff so long as it is sold and used. If the electrical dealers don't sell it and the other merchants do why should we worry?

"Instead of looking for the bugs in my scheme, these fellows ought to look for the advantages. I repeat, it's a good scheme. It has been worked. It has been a success. I want to work it and make a success of it down in Center City. But if the dealers there take the same stand as your dealers here, then they can get ready for competition—hardware store competition, 5-and-10-cent store competition, even central station competition."



Cultivating the Women's Clubs

By J. H. JOHNSON

"Make electric cooking fashionable" is one useful line of attack for the electric-range salesman to follow. One way in which this can be done is to offer to install a range for the hostess of each club in a city so that she can have an electric luncheon. The idea would undoubtedly appeal to the women and would give a valuable list of prospects which might be followed up personally. This idea, moreover, can be developed along almost any line desired.

The Electric Range and the Colored Cook

How the Central Station Company at Charlottesville, Va., Has Sold Fifty-two Electric Ranges Among Leading Local Citizens by Training Their Negro Servants in the Use of Electric Cooking

By G. H. SMITH

Commercial Manager, Charlottesville & Albemarle Railway Company

IT was at the Panama-Pacific Exposition out in San Francisco that John L. Livers, vice-president and manager of the Charlottesville (Va.) electric lighting company, saw a number of electric ranges giving such good service that he decided on his return to try to introduce them to Charlottesville. He secured two on consignment in January of last year, and promptly proceeded to put one of them to the test in his own home, while the other was placed in the company's salesrooms.

Later an electric-cooking campaign was determined upon, and following a week's demonstration campaign by a Hughes

representative, during the course of which twenty-one ranges were sold, a colored teacher in the local colored school was placed in charge of the educational work. The company made a special effort to secure as its first customers the best-known people in town, realizing that if they became boosters the rest of the prospects would be easier. The ranges, which varied from the two-unit type with small ovens to the four-burner type with oven, broiler and warming closet, were first installed on thirty days' free trial, no charge being made for either the range or the current used. If satisfactory, they could be bought on a cash or installment basis, no deposit being required. The special cooking rate made, including pilot lamps, was 3 cents for the first 200 kw.-hr. per month, 2.5 cents for the next 200 kw.-hr. and 2 cents for all energy above 400 kw.-hr. It may be added

that the cooking rate also included three outlets for appliances such as flatirons and vacuum cleaners.

The work of the demonstrator was

influence among her people. The value of her school work is shown by the fact that this season some seventeen students, both girls and boys between the ages of fourteen and seventeen years, will be graduated with a thorough knowledge of and predilection for electric cooking. Furthermore, as they graduate the company will arrange to place them in jobs at wages better than the usual scale.

To insure each installation being a success, the company made it a point to install the range at the most convenient place in the kitchen, and to place the meter directly at or near the range with instructions to ob-



These colored cooks who had formerly handled only coal stoves, are to-day turning out unsurpassed Virginia cookery on the electric outfit shown

divided into two main parts—first, to instruct colored servants and, second, to teach electric cooking at school. This woman has taught for fifteen years, and naturally has considerable

serve the readings from time to time. In particular the demonstrator was told to get the user to think of energy consumption in *cents* instead of in *kilowatt-hours*. She did this by saying that the oven or some other unit operated for so many cents in such and such a time. A typewritten card with data of this kind was also made up.

Pilot lamps were used to prevent waste. The company also recommended that the entire range be cut out of service by disconnecting it with a service switch. One pilot lamp is in the kitchen and the other in the living room or on an upper floor, as desired, where it is under the observation of the mistress of the house. These lamps are wired in series and serve as reminders to shut off the range and give notice of any unauthorized use of the range.

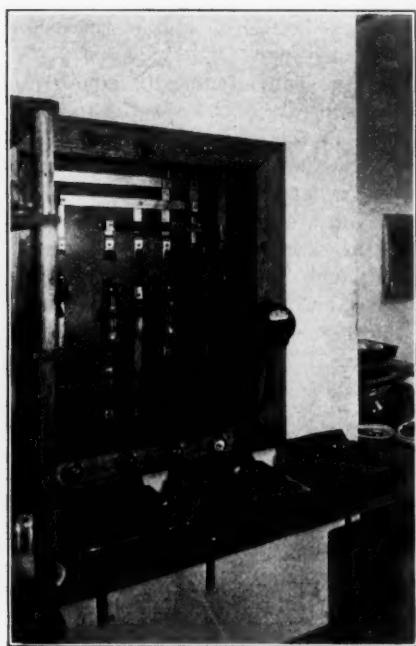
Finally, the company made a special



The Miramont apartments, Charlottesville. Equipped with electric kitchens throughout

point of having its demonstrator present at the preparation of the first meal. Pains were taken to have her return as often as necessary to insure the complete education of the user. A bureau of inspection is maintained to see that the ranges are kept in the best possible condition. The company has received several good hints from experienced customers who have found ways of saving energy, particularly by doing as much work as possible in the oven.

Aside from the free range which is installed permanently at the colored school, the company gladly loans



The panelboard which supplies the electric range, waffle irons, coffee-urn and steam table in hotel kitchen pictured in illustration opposite.

ranges and gives free current to various women's clubs, church socials and the like. The demonstrator is present with edible proof of what the ranges can do. On the occasion of a visit from a noted teacher of dietetics, who gave a two weeks' course at the University of Virginia Hospital, the company co-operated with her, to her great satisfaction.

One little sidelight on what the public thinks of the company's liberality is the remark of a woman church worker who said she felt conscience-bound to buy some electric waffle-irons instead of borrowing them because of the way the company had helped in so many affairs.

At this writing some fifty-two electric ranges are in use in a town with

about 425 prospects. At least 25 percent of these prospects will eventually materialize.

SMOOTHING OUT THE LOAD CURVE

The electric range naturally has had the effect of smoothing out the load curve, which is especially desirable in Charlottesville, where there are no large industrial possibilities for electricity. The present average consumption of energy is about 100 kw.-hr. per range per month (387 range-months) and the average monthly income per range is \$3.50. The sales cost plus actual installation cost per range averages \$20. Up to April 1, 1917, the total revenue from the sale of energy for electric ranges had reached \$1,360.

One of the most interesting installations is that of the Lyndhall Apartment Hotel. The range there is of 35.3 kw. connected capacity. It turns out 9000 meals a month at \$42.50, or about 0.5 cent per meal per person. In this apartment the temperature of warm water from a coal-using hot-water circulating system is boosted electrically.

OFFSETTING GAS-RANGE COMPETITION

To offset gas competition, it was necessary to find a cheap means of heating water, incinerating garbage, etc., for electric range customers. At 3 cents per kilowatt-hour, the electrical heating of water, while found effective, was not economical because customers usually heated too much water at one time. As local plumbers wanted too much money for the proper device, the company arranged to get a combination laundry, water heating and garbage incinerating outfit of the "Hercules" type from the Continental Brass & Foundry Company, St. Louis. These outfits are placed in the basement wherever practicable. They are sold only to users of electric ranges and at net cost. Twenty-seven of these combinations are in use. The maximum price is \$16, payable within six months.

In conclusion, it should be stated that all the advertising the Charlottesville company did was confined to five days of full-page copy. A customers' co-operative "ad" reproduced among the others, appeared on Sept. 15 of last year, three months after the inauguration of the campaign. All other publicity was in the form of personal solicitation.

Winning a Coal Mine to Central Station Service

Just outside of Wilkes-Barre, Pa., there is a coal mine that has been maintaining its own electric plant for several years. When a power salesman from the Wilkes-Barre Company called and talked central station service to the management, they pointed with pride to their own installation.

"We can furnish our own energy at 0.5 cent per kilowatt-hour at the switchboard. Can you give us a better rate than that?"

"No," admitted the salesman. "Your figures are very interesting. May I see how you get them?"

Very proudly the mine official went through his computations, while the salesman followed him carefully.

"That's right as far as it goes," he admitted, "but I don't see any charge for coal on that sheet."

"Why, my dear sir, this is a coal mine. We use our own coal, of course."

"Do you ever sell the grade of coal that you use in your power plant?"

"Tons of it."

"At how much per ton?"

"One dollar."

"And how much coal did you say that power plant of yours uses?"

"Oh, about 60 tons a day."

"Then let's charge up \$60 a day on that sheet of yours and then see where we stand."

The salesman left with a signed contract in his pocket, and the mine official effected a substantial saving in his power costs.



Follow the Marriage License List

One of the strongest leads obtainable for the electric range or appliance salesman, according to the experience of a Texas central station company, is the list of marriage licenses issued or obtainable at the county clerk's office. In the majority of cases, in towns where range campaigns are under way, newly married couples are in the market for a range, or, if not immediately, soon will be. The husband is anxious to please the wife and the wife the husband. What better prospects could a salesman want?

A Dealer's Index of Profits and Turnover

Sales Slips and Stock Cards that Enable Proprietor of San Francisco Electric Shop to Keep a Perpetual Inventory and to Watch Supply, Demand, Rate of Profit and Relative Salability of His Stock

BY the use of a stock-card index and a system of entering costs the "Home Electrical" shop in San Francisco maintains a perpetual inventory, which the proprietor finds a most helpful guide to wise buying. It also tells at a glance what lines afford the largest profit and what the net sales profits are for successive weeks or months.

For every order of material sent out
or for every article sold in the store.

the sale was for cash or on account, and the same information is conveyed by its number when the record of the slip is posted.

The sales slip which the clerk makes out is given to the customer if he cares for it, or it is destroyed. The first carbon, which is the colored slip, is filed at the close of the day in a loose-leaf binder kept for this purpose. The second carbon is on white tissue and is not detachable from the original

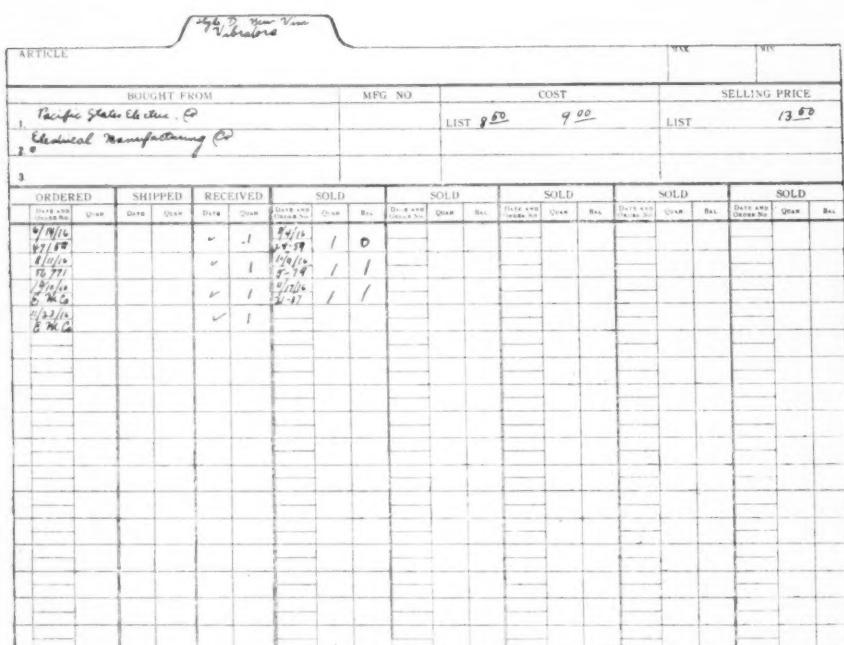
case of charge-account slips he sees that freight or other delivery charges are entered, whether discounts should be allowed, and finally notes in the lower left-hand corner the actual cost of the items sold. Thus, all sales slips show the cost price and the selling price. The items on the charge-account slips are entered on the customer's bill, after which the sales tag is marked "Billed" and is ready for the bookkeeper.

In the same binder in which the sales slips are filed a sheet is inserted for totals of each day's sales. This insertion has entered upon it, in addition to date, three items: the total cash sales for the day, the gross profit, and the ratio of profit to total value of goods sold. Total sales and profits for weekly and monthly periods are likewise entered on insertions in the same binder. That is, this is done on all cash sales. On the charge accounts the daily and weekly summations are omitted, but monthly statements are made out.

STOCK CARD INDEX

The shop carries a general line of appliances and contractors' materials in stock. For the most part only a small stock is carried because jobbing houses are convenient. It has been found possible to classify the various kinds of stock handled into twenty-three general headings. Some of the headings, for example, are "heating devices," "flashlights and batteries," "portable shades and reflectors," "sockets and receptacles," etc. Goods procured and sold on special order are not entered on these cards. The classifications used on the cards have been selected in such a way that when the business grows and more headings are necessary, it will be a simple matter to increase the number of headings by subdividing those already in use.

At the outset a stock card was made out for each classification, and as each card is filled up it is replaced by duplicate card No. 2, etc. The cards are about 6 in. by 8 in. in size and entries are arranged under headings, as shown in the accompanying illustration. It will be noted that the general



One of the stock cards. The stock handled is classified under twenty-three general headings, so selected that as the business grows other subdivisions can be added

even though it be only a 5-cent item, the clerk makes out a sales slip, of which two carbon copies are retained by the store. These slips are supplied in books of fifty each, and are numbered consecutively, each slip carrying also the book number. Different books are used for cash and charge account sales. These books are identical in size and form, but in the cash-sales book blue paper is used for the carbon copy, while in the charge-account book yellow paper is used. The blue-book numbers begin at 1, while the yellow book numbers begin at 200. Thus the color of a sales slip indicates whether

stub. Thus, the fifty tissue carbons of each book are kept together and filed away with the book number on the outside for convenient reference in case the other records should be lost.

**COST AND SELLING PRICE ON
EACH SLIP**

Each day's sales slips are examined by the proprietor before the book-keeper is permitted to record the sale. It is the proprietor's practice to attend to this every evening so far as feasible, so that the posting can be kept up to date. On the cash sale slip he simply enters the cost of the item in the lower left-hand corner. In the

GENERAL ELECTRICAL CONSTRUCTION CO.
INCORPORATED
Electrical Dealers and Contractors
Prospect 2012
Prospect 2013
301 Mason St., Cor. O'Farrell
John Smith Co Inc San Francisco, Calif.

Name	Market	Job of Site
Address	50	228
Quantity	DESCRIPTION	AMT. REC.
50	23 W - 130 Wcc Clear Magneta	13.50
30	"	8.10
20	"	6.40
		27.00
	% Cost Rec 17%	4.57
	Plus Tax	8.4
		33.25
<i>Balmer</i>		
<i>John Smith Co Inc</i>		

KEEP THIS SLIP, NO GOODS EXCHANGED WITHOUT IT
RECEIVED PAY ME CASH AND PAY ME BILLS PAY ME BOOK CO. BIRMINGHAM, ALA.

One of the sales slips filled out. The back of the slip carries an advertisement for the electric shop

classification appears on the tab projecting at the top of the card. There are three blanks for the names of jobbing houses, and the space for cost and selling price is always filled in. In the particular instance illustrated, the first vibrators cost \$8.50. When the manufacturer raised the price to \$9 the retailer changed his price from \$12.50 to \$13.50.

METHOD OF RECORDING ORDERS

In the column where orders are listed are recorded the date of order and the manufacturer's number or initials. The quantity is checkmarked when it is added to the total in the column headed "Balance." Under the heading "Sold" it will be noted that there is recorded the date of each sale and the page and book number of the sales tag. Since all the book numbers in all three items entered on the sample are less than 200, it is seen that all these sales were for cash.

In entering up charge account cash tags the bill number is made up from the combined tag and book number; for example, charge slip (yellow) No. 9 in book No. 247 is entered in the customers' ledger as bill No. 9247.

SHOWS TREND OF PROFITS

It is notable that the percentage of profit has increased in the two years since the establishment was opened. Of course, this is to be partially at-

tributed to the recent organization of contractors and dealers and to the resultant co-operation among them, as well as to the increased business which the growing popularity of such an establishment would naturally attract.

VALUE OF STOCK CARD AS A BUSINESS PRODUCER

However, a considerable share of the increase, which the proprietor reckons as several hundred dollars, is to be attributed entirely to the use of the stock-card system. He points out that a brief survey of the stock cards is sufficient to indicate undesirable stock, which is then promptly discontinued. In the case of very profitable lines a card record shows where the demand warrants purchasing in much larger quantities and thereby securing better discounts.

The stock-card record saves many a search through bill files because all purchases are recorded together with date, bill number and quantity. Finally, the method of entering costs on all slips, both cash and charge, enables the proprietor, by means of a short calculation, deducting fixed charges and overhead, to know exactly how he stands financially.

Columbus Contractors Entertain Lighting Company's Salesmen

The members of the new-business department of the Columbus (Ohio) Railway, Power & Light Company were entertained at a banquet and theater party given by the Columbus Electrical Contractors' and Dealers' Association in connection with the first annual meeting of the organization on March 14. In addition to the twenty-six representatives of the company, there were eighty-five contractors and dealers present.

The contractors' association was formed in March, 1916, for the purpose of co-operating to the fullest extent possible in the electrical industry in the city of Columbus. During that period, the Columbus Railway, Power & Light Company alone has taken 829 contracts for the wiring of already-built houses. This work is all turned over to the contractors under a plan whereby the company pays the contractors in full at the completion of the work and allows the new customer to pay the amount in ten

monthly payments with his light bill. The contractors have wired more than 400 already-built houses.

This meeting was unique in the fact that the contractors' association acted as host. A fine spirit of co-operation is in evidence between the association and the central station, and both sides have pledged their loyal support to the advancement of the electrical industry in Columbus and vicinity.

O. L. Bowers is president of the contractors' association and Howard Thompson is secretary. C. A. Entekin, a prominent contractor of the city, made a most successful toastmaster for the evening.



This Salesman Finds It Pays to Write Out His Orders in Advance

By M. G. WILLIAMS

The dealer who does not already stock flashlights has little idea of the small amount of money required to carry a reasonable stock. In attempting to sell to such dealers I have found it very helpful to make up a representative order in advance like that shown. Upon approaching the dealer I simply let him glance at the schedule as it is written up and it very often clinches the order right then and there without further argument.

This is simply applying the familiar powerful effect of suggestion in a new way.

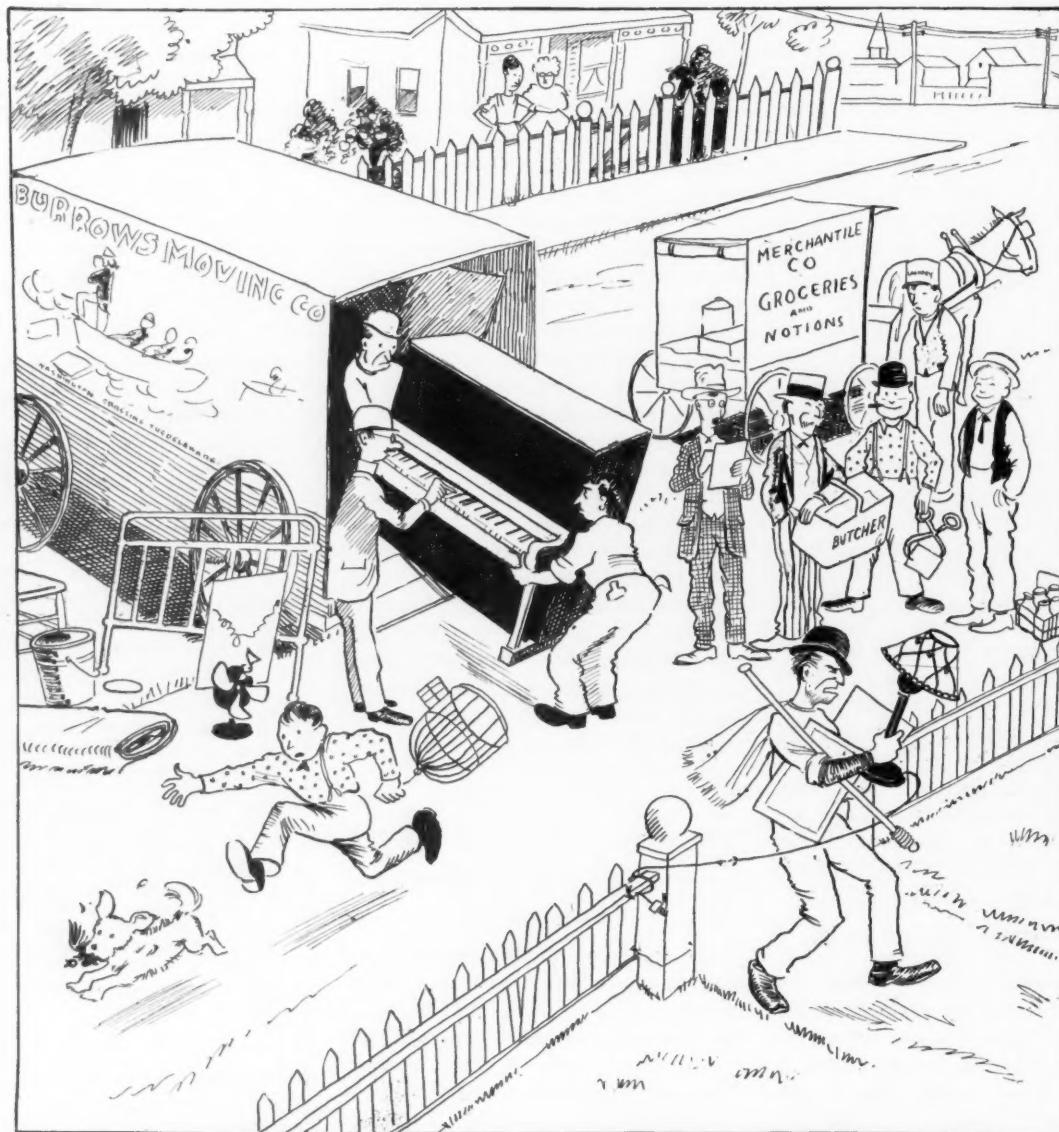
ORIGINAL
MATTHEWS ELECTRIC SUPPLY COMPANY, Inc.
No. 2 North 20th Street
BIRMINGHAM, ALABAMA
DATE Jan 10-12

ORDER NO.	CHARGE TO		
SHIP TO O. T. Cole & Co Luscaloosa, Ala. VIA Express			
TERMS C.O.			
QUANTITY	DESCRIPTION	LIST	AMOUNT
3- 246	Flashlight Complete	1.50	4.50
2- 243	"	2.00	4.00
4- 260	"	1.20	4.80
2- 265	"	1.00	2.00
2- 750	"	3.00	6.00
6- 752	"	.30	1.80
6- 758	"	.40	2.40
6- 791	"	.50	3.00
		Total	\$17.30
		Less tax	\$16.92
		Net	\$16.38

RECORDED
SIGNED

An order made out in advance sometimes clinches the deal without argument.

"Everybody Called Except the Electrical Contractor"



Moving-Day is New-Customer Day for the grocer and milkman—why not for the electrical contractor and dealer, too, when profitable jobs and sales are waiting for him in each new-settled household?

EVERYBODY called except the electrical contractor—and he was the very man I wanted most of all," complains a friend of ours who moved into a new home the other day.

"While the moving vans were still outside, the grocer and the laundryman, the butcher and the milkman each stopped by to ask for trial orders and get a line on our future trade. Even the ice man was friendly-like. Everybody seemed to want to help us get settled.

"But not yet have I been able to catch up with our local electrical contractor, the very man we wanted worst of all, to fix some lights, repair our fan and sell us two or three things for the new house."

Everybody else was "on the job" except the electrical contractor.

Moving Day—May 1—isn't very far off now. With it will come lots of "moving in" in your town, Mr. Con-

tractor, and each newly settled household will have its profitable jobs and sales—yours for the asking.

There will be cords to be repaired and changed; outlets to be moved and new ones installed to suit the newcomers' convenience; fixtures to be hung; sockets to be relamped; fuse cabinets to be filled and extra fuses provided; appliances and fans to be put back into service and even doorbells to be repaired (with perhaps the sale of a bell-ringing transformer in the bargain). There will be unequalled opportunities to sell every kind of an appliance, from vacuum cleaners to Victrola motors. And remember that each new customer becomes a permanent asset in the contractor-dealer's business, a source of future sales.

It will pay you, and pay you well, Mr. Contractor, to be represented in the service line that forms on Moving Day—May 1!

finally arrive there is no interest with it.

"We have to run a supply business in addition to our constructing end. This is necessary because we have no large supply house in this city, and we must have a large supply of material on hand. That means that we have breakage and depreciation to care for.

"Every up-to-date contractor affiliates himself with an association in or-

der to keep in touch with what is going on. The dues to such associations are legitimate expenses, and as such should be considered in overhead.

"In running the office, the items rent, taxes, telephone service, clerk hire, janitor service, light and heat, must all be considered.

"Now, for years we have kept a careful record of all these expenses, and we are not guessing when we say

that it costs us 18 to 28 per cent to do business—we *know* it does."

"I guess you're all right, after all," admitted Sterling. "I hate detail work, and I never stopped to consider the items you have mentioned. I'm going to get busy and get my own 'overhead' on paper, where I can look it in the face."

"And then he put his initials on my bill as it stood."

Two Hours with a Sewing-Machine Man

A Pittsburgh Dealer Explains Why the Sewing Machine Agent Is Taking On Electric Lines and Shows How It Is Done

BY W. E. BAYARD

THE sign over the door read "*Henry B. Carter—Sewing Machines*," and one of the show windows was full of them, but in the other there were electric washing machines and vacuum cleaners. It was the washing machine in motion that caught my eye, so I went in to seek information, and up came Henry B. himself. I opened in the customary way "You are a sewing machine man."

He admitted it.

"Then what do you know about selling electric washing machines and cleaners?" I asked.

He had the answer waiting, just as every other simon-pure merchant has, this truth that such a lot of our electrical men have not yet adjusted themselves to. He said: "Why, selling electrical goods is just the same as selling any other kind. It isn't the goods I have to know so much about. It is the people that I sell to. My business is to know what women want to buy to make the housework lighter. Then I get the goods and sell 'em because I know the way to make my customers buy, and anything that is simple enough to sell is simple enough for me to understand. Why, all I have to know is just a little more about it than the woman who comes in my store, which usually is not much."

I spent two hours with Henry Carter and I would give a good deal if I had had a stenographer along to take down what I heard. In the first place, Carter is a master in the art of selling things to women. He and his father before him have been sewing-ma-

chine agents for forty years in Pittsburgh with a store in the shopping district, and men outside ringing doorbells and selling sewing machines on easy payments. "But times have changed," said Carter. "The department stores have cut the bottom out of the business and the only way the agent can make money now is by broadening out his line and selling his customers again and again. We get the customers when the department store can't, because we put the personal element into it. We show an interest in our customers, and women would rather deal with *somebody* than with an institution. They like to trade with a man who tries to please them. And after I sell them a sewing machine, I keep in touch and sell a washing machine a little later and then a vacuum cleaner and then a toaster, and so on. I get them interested in equipping the home for saving labor and I sell them anything they need."

At this point the telephone rang and gave me a good illustration of just what he meant. Here is Carter's side of the conversation as well as I recall it from my memory and my notes.

"Hello."

* * *

"Oh, yes, Mrs. Winters, I'm glad you called me up. I was thinking about you this morning and was going to call you."

* * *

"Yes, mam. You're right. I promised to have your sewing machine ready yesterday, but we had a little trouble in repairing it. It took longer

than we expected. But I'll send it back to you to-morrow sure."

* * *

"Say, Mrs. Winters, have you spoken to the doctor about that washing machine we were talking about?"

* * *

"Well, now, that's too bad. I hoped that you would settle the whole thing and have it in right now. For I tell you there is no reason in the world why you should wait. It will save you so much trouble in the kitchen and so much housework and so much money, too, after a few months and it's all paid for, that you really oughtn't to wait."

* * *

"Yes, but the time you want the comfort of it is right now. I believe in getting your rest and pleasure while you're living. Don't you?"

* * *

"Well—but look a' here. It really doesn't cost so much the way you'd buy it. Now, honestly, you know that you can afford to buy a washing machine if you want it, can't you? It isn't an extravagance. It's an investment. It is going to save you money."

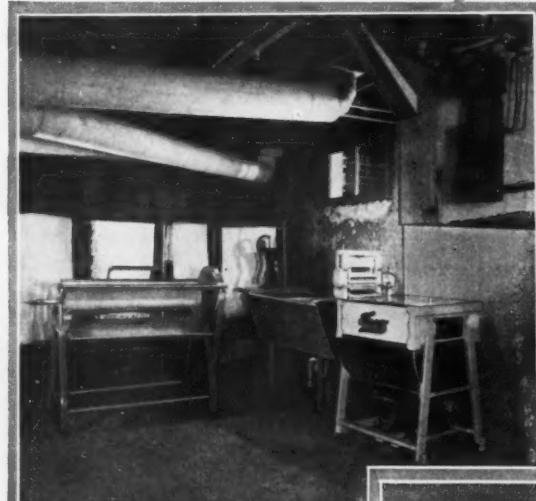
* * *

"Why, of course you can. Now, I'll tell you what I'm going to do. I'm going to send a washing machine up to your house to-morrow and then when you have finished paying for the new sewing machine you can go right on paying \$5 a month for the washing machine."



BELOIT'S ELECTRIC BUNGALOW

A Co-operative Exhibit of House-Wiring Convenience and Electrical Appliances that Gave New Impetus to Local Electrical Retail Sales



This bungalow was placed at the disposal of the Beloit (Wis.) electric lighting company by its owner, and eight merchants of Beloit joined forces in equipping it. One furnished rugs and draperies, another furniture and bedding, and so on. The electric light company installed a complete electrical equipment and did the advertising. In one week 3200 grown-ups visited the Electric Bungalow, despite its distance from downtown. Many sales were made outright, and, following the exhibit, the sale of appliances in Beloit passed all preceding records.

Illinois New-Business Men to Meet at Peoria April 27

The Illinois State Electric Association has appointed a committee on new-business co-operation modeled somewhat along the lines of the plan used in Ohio, and the new committee has arranged the following program for its first meeting in Peoria on April 27.

The program will include a paper entitled "Scientific Window Lighting," by Norman B. Hickox, Chicago, with discussion by H. L. Brandli, Mount Vernon, Ill., and Oliver R. Hogue, Chicago.

Paper on "Financing Contracts for Wiring Old Residences and Addi-

tional Wiring for Appliance Sockets in Premises of Residence Customers," by F. H. Scheel, Joliet, with discussion by W. A. Giffers, Rockford; W. P. Lyon, Chicago; L. E. Spear, Springfield; and W. P. Meiser, Peoria.

Paper on "Electrification of Coal Mines," by Orlie Rue, Mattoon, with discussion by R. S. Woltz, Springfield, and E. R. Elan, Peoria.

Address, "Salesmanship," by A. F. Sieber, Dayton, Ohio.

Paper on "Electrical Merchandise, Its Sale and Upkeep," by E. C. Forrest, Rockford, with discussion by Ernest A. Edkins, Chicago; Frank Lebicker, Alton; C. A. Morse, Mattoon; G. E. Dunn and E. Giaciolli, Oak Park.

Papers on "Industrial Heating Appliances," by L. H. Knapp, Chicago, and B. G. Tarkington, Peoria, with discussion by Roy Larson, Rockford, George H. Jones, Chicago, and C. W. Pen Dell, Chicago.

Paper on "Electric Cooking," by J. Paul Clayton, Mattoon, with discussion by Charles B. Yonts, Dixon; W. F. Corl, St. Louis, Mo.; Mrs. Swanson and Adam G. Schwindt, both of Rockford, Ill.

John G. Learned, chairman of the committee on new-business co-operation, has directed attention particularly to the discussion which will be prepared in advance, a fact which, it is thought, will add much to the value of the meeting.

Where the Missionary Pays His Way

A Contractor Explains How He Co-Operates with His Architects in Planning for Future Sales

By WILLIAM DALES



that make for success for the plumber, the hardware man and the dry goods man make for success in the electrical business."

"Well, what new stunt are you trying now? Haven't you got three salesmen out making a house-to-house canvass?"

"I have. But in analyzing their reports on why they did not sell more appliances I found one of the difficulties was that the homes in this city are all wired with the sole idea of using electricity for light; and when a person wants to buy a silk shade portable he has no place to connect the plug. In the average laundry, for example, there is only one drop light and it is awkward to attach a double-duty plug so one can operate a washing machine or a flatiron."

"This young fellow John is just out of school and I send him up every day to look at the building permits that have been issued. He gets the name of the owner, the general contractor and the architect, and then he immediately starts a missionary campaign to have the home or building wired not only to use electricity for light, but in the case of the home to put in base-

board receptacles for portable lamps, appliances, fans, vacuum cleaners and washing machines, and in the laundry or kitchen a heater control circuit for irons."

"We have found that invariably the architect and owner will overlook these very important little things that mean so much to the comfort and convenience in the new home. It takes just a little missionary work to have these baseboard receptacles and heater control plates included in the specifications."

"It means little in the total cost of the building, and I keep a list in the office here of the new homes that are thus equipped, and to this selected mailing list I send out the advertising matter that is furnished by the manufacturers."

"These baseboard outlets also serve as a constant reminder to the household that electricity can be used for something more than light."

Just then John made his appearance and handed the electrical dealer a report. After scrutinizing it for a minute or two, the dealer said, "Well, Bill, I guess you will have to go along to the game yourself. Old man Higgins has just taken out a permit to put up six \$10,000 residences in the Wilkins plat of lots. I'm going down this afternoon to make sure that baseboard outlets are included in the specifications. I won't have any trouble to get him to agree to this because houses that are wired so that appliances can be properly used are easier rented or sold."

"S'long, old man, I hope you enjoy the game."

Electrical Merchandising

The Monthly Magazine of the Electrical Trade

Volume 17—April, 1917—Number 4

PUBLISHED BY McGRAW-HILL PUBLISHING COMPANY, INC., NEW YORK

Unfinished Business

FOUR years ago an electrical contractor with a good working knowledge of illumination equipped a large industrial plant. It was a big job and a good one; it was, in fact, the "last word" in lighting, and the contractor has boasted of it ever since. But the other day he suffered a shock. Another contractor won the ear of the plant manager, showed him that the supposedly perfect installation had in four years become antiquated, and secured an order for new equipment.

There is a little lesson in this incident. We in the electrical business are inclined to consider a job done when it is finished, but this is not necessarily, not even frequently, true.



Through the Customer's Glasses

"HOW much experience have you had behind the counter?" asked an electric-shop manager of a young man who had just applied for a job as a retail clerk.

"None," admitted the applicant, "but I've had a heap of experience as a customer!"

He landed the job.

The ability to put on the customer's glasses and see windows, cases and prices from the buying side of the counter is an asset that cannot be too highly valued. Every electric store salesman is also a buyer. He must purchase clothing, neckties and shoes. The electrical man who can remember how other salesmen and clerks showed him their merchandise in a way that invited his interest and encouraged him to buy—and who can apply these methods in his own every-day selling—is the man who will contribute to the building of a clientele of satisfied patrons for his store.

The Value of a "Jiner"

SOME men are natural "jiners"; some are not. Some strive to have another place to loaf where they can throw more bricks at Father Time; some have another reason. And it is interesting to see how many electrical men within the last few years have swelled the latter class.

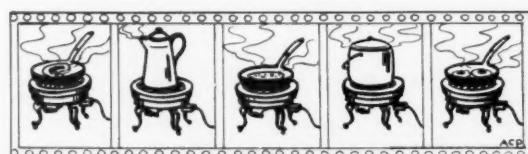
How many times within the last five years have we read of the election of a central station general manager to be the president of the chamber of commerce in the com-

munity he serves. How many times some lighting company's sales manager or salesman, because he has been active in civic work, has been made head of this or that committee of the board of trade, or put upon the board of education, or given other work to do for the people. And what reward it brings.

The very nature of the man who heads or represents a public utility puts a premium on friends and reputation.

He must stand before his city as a fair and honest man. He must give confidence and influence by example if he would hope to be successful in the winning of his public to the new ways of doing it electrically—his mission in the business he is in.

The man who joins the board of trade, the neighborhood improvement association or the fraternal body made up of local business men, has found himself an opportunity to serve them four ways—to serve his town, his friends, his company and, most of all, himself—for he is the one who will benefit the most.



The E Pluribus Unum Appliance

SK any man who is old enough to shave, if in his variegated past he hasn't bought one of those handy little tool outfits that claim to make you independent of the plumber, carpenter and blacksmith for evermore. Every home possesses one, because this *e pluribus unum* idea appeals. And that's why the electric grill is saleable in every electric-lighted household in the land. For you can use a grill in so many different ways.

The grill is listed on the N. E. L. A. co-ordinate advertising schedule as the May campaign feature. Don't overlook the fact that it points out a big and profitable opportunity for you right in your town. For there are lots of homes that have not yet acquired their first appliance and this is it.

Sell them the grill. It has a dozen talking points, because it does a dozen different things. It lures the woman as the "handy-tool" does; it lures the man. A grill belongs in every home. And if you cannot sell grills in your town you are mighty apt to be the reason.

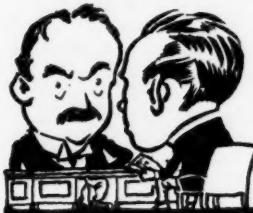
Some Illuminative Cost Contrasts

THE average office can be lighted adequately for about the cost of towel service in the same office—for about half the cost of ice service to the water cooler—for a fraction of the telephone charges—for much less than it costs to sweep the floors and empty the waste paper baskets.

If good lighting is to be considered expensive, how can the laundry man, the ice man and the janitor justify these other charges?

If these figures do not check in your office or in that of your customer, get other common comparisons that will. There are many of them, and they make exceedingly valuable sales points.

IDEAS FOR THE MAN WHO SELLS



Plans, Schemes and
Methods to Increase
Sales of Electrical
Goods



Public Spirit in Central Station's Sign Selection

When the erection of an electric sign on the roof of the Syracuse Lighting Company's West Fayette Street substation came up for consideration, the company's department heads were unanimously in favor of the idea. The text of the electric ad, however, was not so easily decided upon. Some of the men felt that the company's name

man covers his own subdivision as thoroughly as possible. The people in those districts are informed that special rates are in force for a limited time and it is explained to them that the opportunity may not come to that territory again.

The Scranton company believes in rating its monthly business in net—that is, when say 600 wiring contracts are closed in a given month, the number of disconnections is subtracted. Transfers, of course, are not counted as meter sets. A large percentage of the disconnections will be back on the company's books at some future date, when they will appear in the totals for the month in which they are secured as new connections. No contract is entered on the month's business sheet until the meter is in and service is actually established.



This sign, erected by the lighting company, passes the message of industrial welcome to scores of travelers each night.

should be used, but it was finally decided that since the sign faced a railroad track and would be seen by many scores of travelers daily, it would be better policy to adopt a short effective message boosting the city. The result is shown in the accompanying illustration.

Connecting 500 New Services Per Month—Sales by "Zones"

The Scranton (Pa.) Electric Company aims for a steady monthly average of 500 new services connected. Instead of once-a-year campaigns, the company uses a system of concentrated effort on certain zones.

For a given period of time a certain section of the city representing about 2500 population is selected and mapped out into eight subdivisions. These districts are numbered and the company's eight salesmen draw their numbers from a hat. Then each sales-

A One-Week Electric Show That Sold \$3,500 of Appliances

To inaugurate its newly organized new-business department the Consumers' Light & Power Company of Ardmore, Okla., held a one-week electric show at which electrical appliances and electric lighting fixtures were featured, as shown in the accompanying illustration. Thirty-five hundred admissions were registered during the week, and the \$3,500 worth of electrical merchandise sold during the seven days represented a connected load of 56,000 watts.

An interesting aspect of the Ardmore electric show was the co-operation given Paul C. Ekern, manager of the Ardmore property, and F. L.



This display at a one-week electrical show in Ardmore, Okla., helped to bring in \$3,500 worth of business.



A "Fashion Week" to Sell Sewing-Machine Motors

By C. S. BULLER

To stimulate the sale of electrically-driven sewing machines and sewing-machine motors, a "Public Service Fashion Week" was conducted in the Hackensack (N. J.) office of the Public Service Electric Company for one week, and to it all the women in the district were invited. The invitations requested that the women bring their dressmaking problems to the display room, where an expert designer would help solve them.

During the week the display room and window were decorated with newest designs in spring dress goods to represent a high-class dressmaking establishment.

Naturally, many dressmaking problems were solved by means of electrically-driven sewing machines, and the sales results far exceeded expectations.

Blackburn, commercial manager, by their jobber and manufacturer friends. The latter's state sales representatives worked hard to make the Ardmore show a success in every way, and contributed to the event their encouragement and personal help in getting the displays ready.

Prize of \$25 for Best Electric-Cooking Scenario

In lining up its 1917 campaign for selling electric ranges, the Texas Power & Light Company decided to utilize moving-picture shows by producing short films featuring the advantages of electric cooking.

While some of these films were still in the process of making, it was decided to take one of the company's typical districts and conduct there a contest for the double purpose of: (1) Securing publicity for electric cooking. (2) Securing suggestions for other short films.

Of course, as a secondary result of



Motion picture film of an idea submitted in prize contest for electric-cooking scenarios.

the contest the value of this kind of advertising will be determined, and this will serve as a guide in making up the regular schedule for the films when put in general circulation among the towns served by the company.

There are very few women who are not interested in the "movies" and many, indeed, have doubtless had ambitions at some time or other to write plots for moving pictures. It was believed, therefore, that by offering the women folk a prize of \$25 for the best short film about a subject which was being discussed generally the electric range would get much word-of-mouth publicity and would start the housewives talking about this method of cooking.

Moreover, the suggestions sent in by the various customers, it was believed, would prove worth while in making other films and also possibly contain selling arguments from the housewife's viewpoint. The contest was open only to women customers of the Texas company, and the film was limited to 100 ft. in length.

The manager of one of the local moving-picture shows was approached, fell in with the plan at once and agreed to run the short films without charge during the contest.

The contest extended over a period of five weeks and a different film was run each week. The company by means of bill inclosures, newspaper advertising and its range salesmen advertised the fact that these pictures would be shown at the theater and

suggested that those contemplating writing scenarios go and see these films in order to get an idea for their own sketch.

The folder used to announce the contest gave also a synopsis of the five short films which were to be shown at the local theater.

Utilizing the Telephone to Sell Ranges

"If I were going to put on a range demonstration in a small town," declares a man who has been connected with several successful range campaigns, "I would take my select list of prospects and on the morning of the demonstration day would have my demonstrator call each of them on the telephone and extend a personal invitation to be on hand at the demonstration. Such a personal appeal would be very effective and for the small town would be cheaper than any other kind of advertising. This would assure an even attendance, even if several demonstrations were held, since a new list of prospects could be used each time."

Cornering the Old Coffee Pots in Percolator Sale

Customers who take advantage of the Lehigh Valley Light & Power Company's special percolator sale at Allentown, Pa., do not go back to

THIS MONTH ONLY

We will sell Fully Guaranteed

\$6.50 Six Cup Electric Coffee

Percolator for . . . \$5.50

If you bring around your old

Coffee Pot we'll allow you . . . 1.00

Just think an Electric Percolator for only \$4.50

Gummed sticker used at Allentown, Pa., to advertise special percolator offer

their old coffee pots. Of course, no one would ever think of reverting to the old "soup process" of coffee making after a fair trial of the electric way, but Allentown bargain-hunters are even spared that temptation for, taking a cue from a plan that has worked well with electric irons, the company accepts the customer's old coffee pot and credits him with \$1 on the purchase price of the new percolator.

Easier Payments for Early Buyers of Electric Fans

In order to encourage customers to purchase electric fans *early* in the season, the Birmingham (Ala.) Railway & Light Company has devised an installment plan of fan payments by which those who purchase fans in April pay smaller monthly installments than others who buy in May, and so on.

Thus, although the prices paid for a given fan are the same in each case,

Selling the Housewiring to the Tenant

By EDWARD TROMBLEY
Edison Sault Electric Company, Sault Ste. Marie, Mich.

When the owner of a rented house is approached by the central station or contractor to have his house wired for a tenant, his answer is nearly always the same: "If they want light, let them put it in. I am not going to make improvements in that house, the rent is too low as it is."

The question occurred to me—how can the tenant wire that house and save himself money? Eventually, of course, that house is going to be wired for electricity. Realizing this, I now go to see the tenant in regard to wiring the house himself.

I point out to him, for example, that if his landlord installed electric service, it is probable that the latter would raise the rent at least

\$1 a month for a wiring investment of \$15, also that at the end of fifteen months the tenant would have paid for the wiring of the house and would continue to pay that extra \$1 rent as long as he occupied it. Whereas, if he wired the house himself, at the end of fifteen months the wiring contract would be paid.

The landlord is thus put under obligation to his tenant for making the improvement, and it is not likely that he will try to raise the rent, nor will he hesitate to guarantee for his tenant the prompt payment of the wiring agreement, thus protecting the company doing the work. In this way the plan benefits each party concerned.



and this amount, as the plan contemplates, will in every instance be wholly collected by August, the fact that the man who buys a fan early in the spring has a greater number of installments over which to spread his payments, secures for him correspondingly smaller monthly installments.

A Picnic for Both Farmers and Farm-Lighting Salesman

Church festivals and country-school picnics afford rare opportunities to demonstrate farm-lighting plants, as proved by the experience of a Texas contractor and electrical dealer. Since beginning his campaign on farm-lighting sets, this man has set up a complete isolated plant outfit on the deck of a big motor truck which he sends out with his salesman to the scene of the festival or picnic. There the picnic pavilion is festooned with lines of lamps supplied by the lighting outfit, and on hot days half a dozen electric fans provide grateful breezes for the merrymakers. During the day and evening the energetic salesman finds opportunities to explain the merits of electric lighting to each of the representative farmers present, and contracts of sale not closed on the spot usually follow as a matter of course upon a call at the prospect's home the next day or week.

Keeping the Prospects' Histories

A record sheet used by the Rome (N. Y.) Gas, Electric Light & Power Company makes it easy to get the history of every sale, or sales attempt, on paper. By keeping the name, street

Starting a Wiring Campaign with a Credit Coupon

In opening its house-wiring campaign this spring, the Amesbury (Mass.) Electric Light Company sent out a form letter which calls the prospect's attention to the advantages of electric service and the ease with which homes may be wired. Inclosed

By use of this record sheet the entire history of a sale can be written with a total of a few seconds' work

and number in separate columns, the list is easy to run over for the purpose of finding prospects on a given street, or for an alphabetical compilation of names.

in the letter is a coupon which is accepted as a \$5 payment on a wiring account when properly filled out by the prospect.

In order to make this coupon of

value, the house owner fills in his name and address, and specifies the time when it will be convenient to receive a call from a salesman. Such coupons mailed to the company before April 30 will be treated as part payment on any wiring contract taken out by the signer during the campaign period. The Amesbury company also uses a letter-sized folder which illustrates several types of fixtures available.

What a Gift Electric Curling Iron Started

Two months ago a Pennsylvania central station man gave an electric curling iron to a local hairdresser who was doing a successful business in the town. A week later she asked permission to sell such irons to her customers, and up to date she has disposed of more than two dozen of the "electric frizzers" to women patrons.

Free Irons Help Wiring Business

An electric iron was offered free with each house-wiring contract in a campaign conducted by the Standard Engineering Company of Waterbury, Conn. At the completion of the work a salesman was sent to the newly-wired home with the iron, and some other appliances. The free iron gave the representative an excellent opening to demonstrate other devices and the men made many sales in this way.



Make the Weather Man Help Sell Ranges

By J. H. MOSELEY

Texas Power & Light Company.
Dallas, Tex.

A large central station which is starting a range campaign has had a circular letter multigraphed calling attention to the extremely hot weather on the day before and suggesting an electric range as means of kitchen comfort. This letter is being supplied to all electric range salesmen with instructions to mail it to their list of prospects on the morning following the first hot day this summer.

STORE EQUIPMENT AND STORE METHODS



How to Plan and Equip Your Store
—Systems Used in Successful
Merchandising



A "Rack on Wheels" for Displaying Vacuum Cleaners

"The innate cussedness of inanimate objects" has probably revealed itself to every dealer who has tried to set up a display of vacuum cleaners in a prominent position in his store. The average vacuum cleaner will not stand upright, and even with a counter for it to lean against, a slight jar usually sends it sliding down in a helpless heap on the floor. There are busy times ahead, too, for the clerk who attempts to "lead"



Using this rack-on-wheels, samples of the dealer's lines of vacuum cleaners can be quickly rolled to any part of the salesroom for inspection and demonstration.

three or four sweepers at one time to the front of the salesroom for a demonstration to a lady customer.

The Carter Electric Company of Atlanta, Ga., has solved the vacuum-cleaner display problem, however, with the aid of the original rack-on-wheels here pictured. Mounted on castors, the base is provided with a rim around its edge which keeps the sweepers from running off the platform.

The upper rail provides supports for the sweeper handles, and is also transfixated by a number of wooden pins to hold the handles in place. The various types of sweepers for sale by the Carter company are placed in posi-

tion on this movable platform, which is ordinarily displayed in the center of the salesroom, and the entire group can be quickly wheeled to any part of the store where a demonstration is desired.

"Please Keep the Cases Closed"

Pasted behind the counters of a Houston, Tex., electrical dealer's store, in positions which compel the clerks' attention, although outside of the view of customers standing in front, are notices reading "Please Keep the Cases Closed. It Keeps the Dust Out of Them."

With these reminders constantly before them, the clerks have now formed the habit of carefully shutting the sliding showcases doors after waiting on each customer. Ordinary dust is thus kept out of the showcases to a large extent, and when the janitor is plying his broom behind the counter there is little likelihood that two or three cases will be standing wide open, ready to receive the offerings of Ebenezer's busy broom.

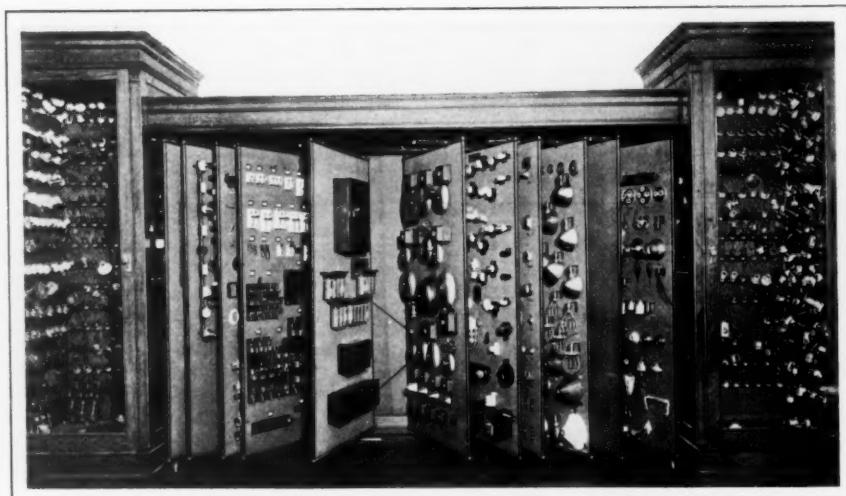
Combining Convenience with Attractiveness in a Special Fixture

It looks somewhat like a telephone booth, but it isn't. To telephone you get a number, step into a booth and then talk, but here you do the reverse. You step into the booth, get a number and avoid a lot of talking.

The cabinet shown in the illustration is an especially designed store fixture for conveniently exhibiting small electrical accessories in the retail store of Stanley & Patterson, of New York City. The cards attached to the displayed articles are put on by the manufacturer and bear complete information for the salesman, giving the shop or catalog numbers, the manufacturer's price and the retail price. Different colored cards are used to distinguish between the various manufacturers.

These cabinets are strongly lighted from above and the many bright pieces in the case attract the attention of the casual customer. The booth being entirely inclosed, dust is prevented from settling on the many little items. The locking feature is also a desirable point.

The folding leaves shown between the two cabinets are similar in design to those described in the February issue of ELECTRICAL MERCHANDISING, although in this case larger divisions are used and are mounted in a somewhat different frame. The canopy over these leaves adds greatly to the appearance of the exhibit and acts as a dust protector to a large extent.

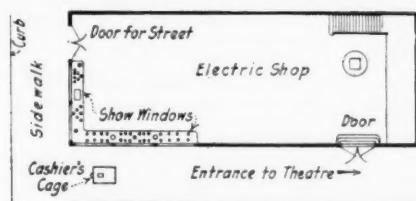


Being able to locate quickly any fitting or appliance in stock, and find its number and price, is one of the most useful features of this specially designed display fixture. Brilliant lighting from within helps to make the polished parts attractive and the dustproof inclosure helps to keep them bright.

Electric-Shop Location Along-side "Movie" Lobby

Realizing that the number of his customers who stop in to buy electrical goods bears a fixed relation to the number of people who pass his shop and look in at his windows, a Texas dealer was struck one night with the advantage to be gained by locating his retail shop alongside the lobby of a popular moving-picture show, and arranging big plate-glass windows full of appliances, along the theater entrance-way through which the nightly crowds pass in and out.

Accordingly when he learned that a popular "movie" theater was to be remodeled, he secured a storeroom flanking the theater entrance and installed



Show window arrangement in "Movie" lobby by which this electrical dealer attracts the attention of the theater crowds.

big show windows along the entire lobby side of the salesroom except for a doorway opening directly into the electric shop from the lobby. The sketch shows the relation of shop and lobby as actually worked out to secure the attention and interest of the movie patrons, and to thus extend the selling influence of the appliance display long after the ordinary shopping crowds are off the sidewalk.

Displaying Side-Wall Fixtures Mounted

The Rome (N. Y.) Gas, Electric Light & Power Company displays side-wall fixtures as they will appear when installed, by mounting them on hard-wood blocks provided with small screw-eyes at the top. Hooks are arranged on the side wall and each fixture is displayed so that the customer can see the effect of the mounted piece.

The W. D. Crandall Company of Jackson, Mich., suspends its fixtures on brass chains, and the boards on which the fixtures are mounted are held away from the wall by cleats around the back edges of the bases.



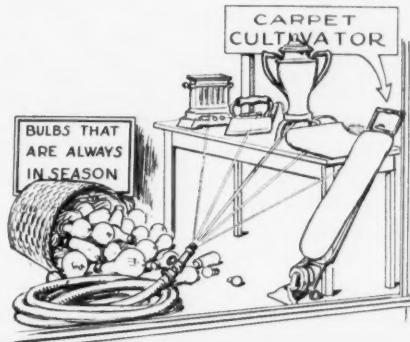
Bracket fixtures displayed as they will appear when installed

Each panel of lamps is served by a cord connected to the wiring back of the board with easily removable connectors, making it possible to show the lamps lighted.

Putting Springtime in Your Window

"Give us some window bunches of your own once in a while," suggested a dealer the other day. "What has been done before is good stuff, but we want some new suggestions, too."

Here, then, are some spring suggestions. With food prices as they stand at present, gardening is a leading thought in the minds of Mr. and Mrs. Homedweller, and a gardening window should attract their attention. You can trim the window in grass-colored crepe, using a trellis background with paper flowers spread over it. A garden hose is coiled in the foreground, with strings running from the nozzle to several appliances on a table or other support. The appliances might be mounted on a lattice work against a background of artificial leaves and vines.



A sprinkling of electrical helpers

A Sewing Machine Motor Motion Display

Motion in the show-window display never fails to attract attention. During a campaign on sewing-machine motors one New Orleans dealer last month made use of a sewing-machine motor to operate a toy bicyclist in the manner pictured. These bicyclist toys are carried by most toy dealers and are arranged with concave-rimmed wheels to run along on a stretched cord, being weighted so that bicycle and rider always remain upright.

The cord or belt simply has to be passed around the motor wheel and



A sewing-machine motor was at the bottom of the daring feats of this slack-rope toy cyclist in a New Orleans dealer's show window.

through two pulleys suspended from the sides of the window. When the motor is started and the cyclist is put in position, he appears to be pedaling away for dear life, and his flying legs of shining red tin are bound to "pull" all passers-by, even from the curb.

Top Edge of Drawer Used for Measuring Lamp Cord

The top edges of the fronts of the drawers containing lamp-cord stock are convenient places for measuring off the number of feet or yards of wire called for by a retail customer. One Alabama dealer has laid off pencil marks indicating feet and inches on the top edges of all the drawers used for holding the light wires and cords ordinarily sold over the counter.

To measure a few feet of wire the clerk need no longer hunt up a yard-stick or tape, nor even lift the coil of wire from the drawer. Instead he simply picks up the loose end of the coil, lays off the required amount, cuts it, and drops the rest back into the drawer in the place designed for it.

A Card Index of Stock That Helps the New Salesman

At the Cicero (Ill.) store of the Public Service Company of Northern Illinois a card record is maintained to show the location of all of the goods in the store. This record is kept on the regular stock cards. A number is placed on the cards which corresponds with the number of the shelf or drawer in which the goods are kept. When it is necessary to relieve the regular sales force with men not entirely acquainted with the store it is easy for the new men to find the goods by consulting this card index.

If, for instance, a customer should inquire for a key socket and the clerk did not know where the sockets were kept, he could look in the card index under "S" and there find a card on sockets giving the location of these goods, with reference to the position of the shelf and the number of the stock drawer.

This index has proved particularly valuable at the stores of the Public Service Company where one man usually constitutes the entire sales force. In his absence one of the outside salesmen is usually pressed into service, and to him the card index is a real help.

Borrowed Show-Window Backgrounds

The electrical dealer who wants help in getting up his window displays can often obtain not only practical advice but also window-trim material to use, if he will make friends with the window trimmer of a local dry-goods or department store. One Birmingham (Ala.) dealer keeps his windows attractively dressed by adapting the background material of a big department store, after the latter's displays have been used and discarded. Such stores often have a quantity of this background material which they throw away after using it a week or so, and if arrangements are made, will be glad to pass such displays along to someone else who can use them. With the totally different classes of goods exhibited, and with the varied arrangements that a clever window man can introduce, the electrical dealer's borrowed display may be hardly recognizable even by persons who have stood before the original department

store window. The Alabama dealer referred to finds this an inexpensive and easy way to get striking window exhibits.

Bread-Pan Trays for Small Lamps and Parts

B. J. Garvin, store manager for the Russell Electric Company, Atlanta, Ga., has discovered that ordinary bread pans, like the ones mother used to bake with, make excellent and inexpensive trays for holding miniature lamps, flashlight batteries, fuses, bushings, and other small articles which, left to themselves, have a dis-



Bread pans serve as trays to hold flashlight bulbs, fuses, and other small parts in this Atlanta store.

concerting way of straying over the showcase shelf. The accompanying picture shows how the Russell company makes use of these tin bread pans, featuring them well up in the front of its store along with the flashlight parts which are one of its most popular lines and are therefore kept conveniently near the door.

The Baltimore Electrical Supply Company's store in Atlanta also makes use of bread pans to hold small parts. J. J. Smith, local manager, has these pans labeled with sticker tags on both inside ends, so that customer and salesman can read the labels from opposite sides of the counter. In the case of flashlight lamps the pan labels carry also the designations of appropriate batteries, so that the clerk need lose no time in looking up a catalog to find the corresponding lamps and batteries, or risk trouble from burn-outs.

A Contest that Bred Familiarity with Stores and Stock

The merchants of Omaha, Neb., have taught a large part of the residents of that city a number of things about their stores and goods. A prize contest was organized, in which each store offered one or more articles from its stock as an award. Each store displayed its prize in plain view of its customers, and the object of the contest was to submit a complete list of stores offering prizes, together with the names of the articles which were so offered.

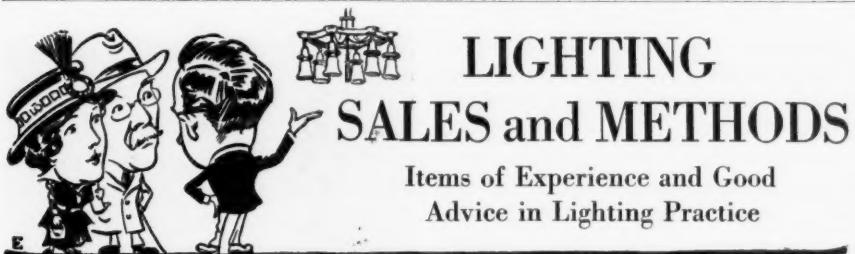
The Wolfe Electric Company offered an electric percolator, which was placed on a table in the extreme rear of the store. Contestants came in the store, looked about in the front of the shop, and then asked the clerks where the prize was located. When they were directed to the back they gained a fair idea of the store and its contents in walking through it.

The local newspaper staff managed the contest, and also took complete charge of judging the answers and awarding the 150 prizes, which varied in character as is indicated in the range of value—from \$1 to \$300.

"Yes, at Ye Electric Shop"

When Homer Wood opened his first electrical store at Richmond, Va., he settled on the name "Ye Electric Shop," and has since proceeded to capitalize on good service and business-like methods, with such success that to-day he has two such "Electric Shops," both of which are doing a thriving business in the Virginia city.

The wording of an electric sign for the shop doorway received some thought shortly after the first store was opened, and, passing over the suggestion that the entire legend "Ye Electric Shop" be blazoned in electric lights, Mr. Wood compromised on a three-letter sign made up of the initials of the name. The effect of this blazing word "YES" suspended from a corner where it can be read for several blocks along two streets has been truly electrical, and now when any Richmondite asks himself where he can procure electrical appliances or supplies, he finds a ready answer in the slogan which the sign has built up for the store—"YES, at Ye Electric Shop."



Items of Experience and Good Advice in Lighting Practice

Effective Lighting of a Large Temporary Auditorium

By R. E. HARRINGTON

In installing the lighting for the average temporary auditorium structure little attempt is usually made to actually design the lighting system. Observation shows that in almost every such case the lighting is apparently the last thing to receive attention, and after the completion of the building a self-appointed "lighting committee" proceeds to mark on a set of plans, or point out to the electrician, where they think lamps should be placed. These committees usually base their estimates on the 16 cp. carbon lamp—and seldom think of a reflector. As a result, clear, bare lamps are strung everywhere. The electrician, moreover, does not use carbon units, but instead is likely to place brilliant tungsten or gas-filled lamps throughout, in plain view of the public. The resulting installation is excessively glaring, and, no reflectors being used, the utilization efficiency is low.

For the spirit of the revival service brilliant, spectacular, high-intensity lighting is desirable. On the other

hand, glare is seriously objectionable, for it makes the audience sleepy, irritated and in no receptive frame of mind.

In the great temporary Lyon Tabernacle erected this spring at East Orange, N. J., the lighting was in-



Five-hundred-watt lamps were used with enclosing globe fixtures

stalled in accordance with illuminating-engineering principles. Fortunately one of the members of the lighting committee was a man high in the lighting profession who realized that an installation of this magnitude could not be handled by an amateur and should not be left until the last mo-

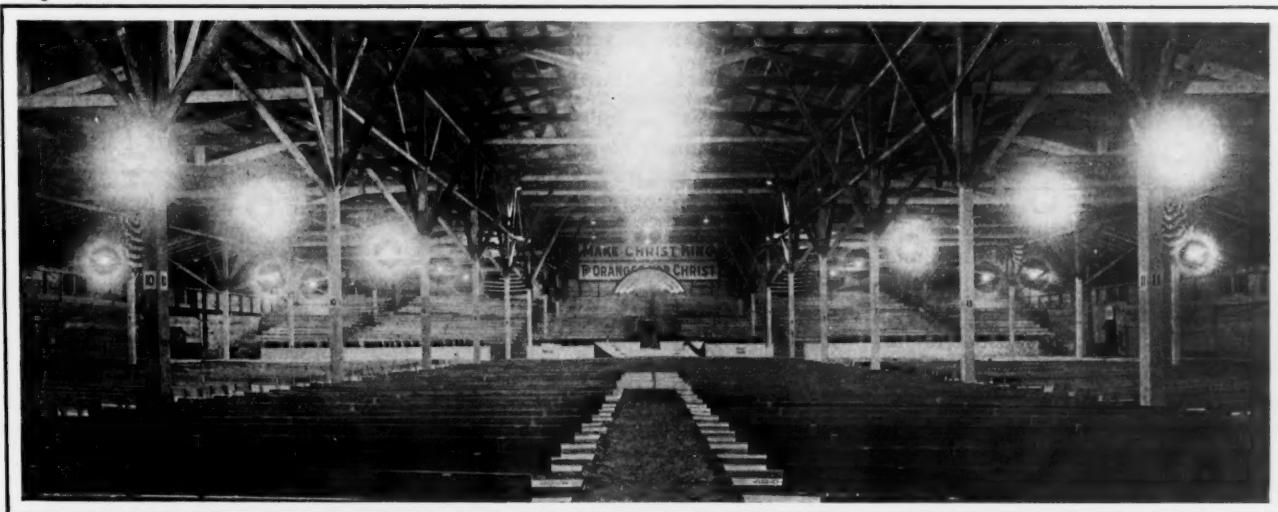
ment. The preliminary plans of the structure were therefore at once referred to the engineering department of one of the large manufacturing companies for a lighting layout. The contractor was given instructions to follow these specifications in detail and as a result the entire lighting of the structure is comfortable, the appearance is attractive and a minimum of electricity is expended for the desired effect.

The tabernacle, as shown, measures 200 ft. long by 160 ft. wide. There are five sections lengthwise of the building; those at the side are 16 ft. wide, while the three center sections are 36 ft. in width. The columns are approximately 18 ft. apart.

From a lighting standpoint the structure may be divided into three parts; at the north end is the choir, with a seating capacity of 1200; next is the pulpit and facing this the auditorium, 140 ft. by 120 ft., with accommodations for 5000.

On account of the temporary character of the installation, it was necessary to select lighting equipment which was comparatively inexpensive. The unit for general illumination was required, however, to be of such a design as to give good diffusion and reduce the element of glare. The particular fixture chosen consisted of a two-piece hood and a 15-in. porcelain enameled reflector, with an opalescent glass stalactite-shape inclosing globe, to introduce diffusion.

Five-hundred-watt clear Mazda C lamps with the inclosing globe type of fixture were used, one in the center of each bay for the three center areas;



For the spirit of the revival service, brilliant, spectacular, high intensity lighting is desirable. In the center row the units were 24 ft. above the floor. In the second rows a height of 18 ft. was used and in the outside, 12 ft.

200-watt Mazda C lamps with similar equipment were used in the side bays, the hanging heights being as follows: Center row, 24 ft. above the floor; second rows, 18 ft.; outside rows, 12 ft. In each case it will be noted that the lighting equipment was hung as high as practical, the reflectors being on a line with the lower edge of the rafters. This is a very important feature in lighting an auditorium. Everything possible should be kept



At the lower end is the choir, next the pulpit, and facing this, the auditorium. The circles show types and location of units.

out of the angle of view. A total of 11.6 kw. was thus required for illumination, giving a consumption of 0.65 watt per square foot. An illumination test with a calibrated Macbeth illuminometer shows the average illumination to be approximately 4 foot-candles; the maximum intensity was 8.4 foot-candles. A minimum reading of 2.2 foot-candles was obtained with the test plate near one of the side walls.

Although the choir at the front required a fairly high intensity of il-

lumination, it was necessary, in order to eliminate bright lights directly in front of the congregation, to use deep-bowl opaque reflectors as the principal lighting units.

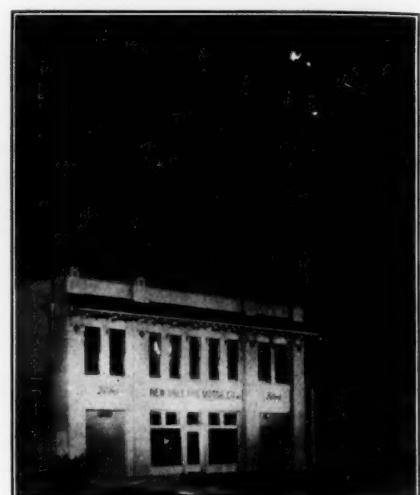
An especially high intensity was provided in the space surrounding the pulpit, as the interest of the congregation is centered at this point for a considerable part of the service. To obtain this effect two 500-watt Mazda C lamps, with rather concentrating angle-type steel reflectors, were placed 24 ft. above the floor on the two posts directly in front of the pulpit. A sounding board covers the speaker's stand. This sounding board is shaped somewhat like the upper half of a clam shell, is 8 ft. wide and 6 ft. deep, the lower edge being approximately 7 ft. above the pulpit floor. Without special provision for lighting, this structure tended to cast a shadow on the evangelist, so a number of 25-watt Mazda lamps in cylindrical trough reflectors were placed on the lower edges of the sounding board, screening the lamps and directing the light upward.

As there are many in the audience who "hit the trail" there is bound to be considerable confusion, and the high intensity of illumination reduces this to a minimum. As the illustration shows, the installation is very satisfactory and has been the subject of many favorable comments. Apparently persons directing like enterprises have not readily realized the part that good lighting can play in their success, and it is to be hoped that the future will show an advance in this direction.

Luring Business with Lumens in Louisiana

The business men of New Orleans, La., are beginning to find out that cash spent in electrically flood-lighting their building fronts is an investment in publicity, rather than an expense. Their education along this line has been materially aided by the efforts of the Consumers Electric Light & Power Company.

One of the first buildings in the city to be provided with permanent flood-lighting was that of the New Orleans Motor Company, located at the corner of Canal and Derbigny Streets. The illumination is obtained by the use of three 500-watt flood-light projectors, and the method of mounting the units



Showing what three 500-watt flood-light projectors will do toward making a building-front attractive.

on a pole may be seen in the illustration. As a result of this installation the lighting company lined up a promising list of prospects.

An Ad That Sold Fixtures

In conducting its campaign on store wiring and fixtures this spring, the Edison Electric Illuminating Company of Brooklyn, N. Y., has specialized on one type of fixture at a special price of \$8.87—\$1.87 down and \$1 a month. This price includes installation complete with wiring, holophane reflector and 100-watt type C lamp.

The ad shown was used as a newspaper salesman and occupied a quarter page of space. Besides inquiries and calls, the "copy" passed that crucial test of bringing in orders for 400 units in three weeks.

This ad brought in real orders in the Brooklyn store fixture campaign.

N. E. L. A. Lamp Committee's Exhibit of Lighting Methods and Practice

The plans which the lamp committee of the National Electric Light Association has been formulating for the Atlantic City convention are being rapidly co-ordinated into an exhibit which, it is believed, will create extraordinary interest. The aim has been to provide educational features without sacrificing the attractiveness of the exhibit.

The exhibit space, which covers more than 5500 sq. ft., has been divided into a number of rooms averaging about 14 ft. by 18 ft. Each of these rooms will feature some particular phase of the central station lighting business.

One room will be devoted to lamp merchandising methods; another to the demonstration of lighting appliances which are new or of unusual business-creating interest; another to incandescent lamps and their principles; another to the advantage of voltage standardization on the three standard voltages of 110, 115 and 120.

Four rooms will present various lighting installations adapted to the bedroom, the living room, the dining room and the kitchen of an average home; the rooms will be completely furnished and the lighting will be controlled by switches in such a way that the various lighting methods may be readily compared.

A store to be constructed in one room will contain a display case, wall case, shelves, etc., so that, with a flexible lighting system installed, the effect of light of different colors may be noted. Two show windows with identical and variable trims will permit, by means of a flexible lighting system, comparison of the effects produced by variations in light direction, light color, and light intensity; it is expected that these windows will attract unusual attention.

A small room will be given over to a display emphasizing the advantages of intensive cultivation of the residence lighting field. This display will include data on typical campaigns to increase residence sockets, together with samples of the fixtures featured in such campaigns.

In keeping with the patriotic spirit of the times and as a central feature of the exhibit, a replica of Independence Hall to scale and approximately

8 ft. high will be shown. This will be complete and accurate in every detail and will be flood-lighted from miniature units, following the same general methods as are used in actual practice.

The lamp committee, of which Frank W. Smith, Jr., is chairman, plans in this way to visualize the lamp situation, interest the convention delegates and tell the story in a much more direct and practical manner than would be possible by confining itself to the presentation of a report.

Showing up "Old Glory" at Night

The 12-ft. x 7-ft. American flag shown herewith was flood-lighted by one General Electric Form L-1 flood-lighting projector. This projector was equipped with a 500-watt Edison Mazda C flood-lighting lamp, and was



Through the use of one flood-lighting projector "Old Glory" may be shown gleaming triumphantly through the night.

mounted about 60 ft. behind the flag and 30 ft. below it. The flag was suspended on a rope between two buildings.

Since the material of this flag was fairly translucent one projector was satisfactory. The distance between the flag and the projector was sufficient for the beam of light to cover the flag when in any possible position.

According to L. E. Porter of the Edison Lamp Works the method to be used in lighting a flag depends almost entirely upon location conditions, such as available locations for the pro-

jectors and size and type of flag. If the flag is of such material as to be fairly translucent, one projector is satisfactory. In this case it should be mounted sufficiently far away so that the spread of the beam will cover the flag when standing out at right angles to the pole, in directions 180 deg. apart. However, no mistake can be made on any type of flag if three projectors mounted at the corners of an equilateral triangle are used and trained upon the flag, each one being spread as above.

Salina's Electric "Welcome" and "Come Again" Sign

The city of Salina, Kan., has just completed the installation of a large electric sign costing \$3,000, toward which the Salina Light, Power & Gas Company, operated by Henry L. Doherty & Company, contributed \$500. The electric company agrees to maintain and operate the sign from dusk until midnight, furnishing the necessary energy free.

The sign is in the shape of an arch, measuring 38 ft. long, and on the side facing the station are the words "Salina, Your Opportunity, Welcome," and the other side reads "Salina, Union Station, Come Again," the whole surrounded by a border of colored lights.



Spring "Millinery" Made from Electrical Supplies

By R. C. ANDERSON
Cleveland, Ohio

A Cleveland electrical dealer has drawn much attention to his store by means of a window display made up of synthetic spring hats. Among the ingenious devices shown were lamp shades trimmed with green cord, reflectors decorated with black-and-white cord, and a disk stove, inverted and rendered gorgeous with warming-pad and tape embellishments.

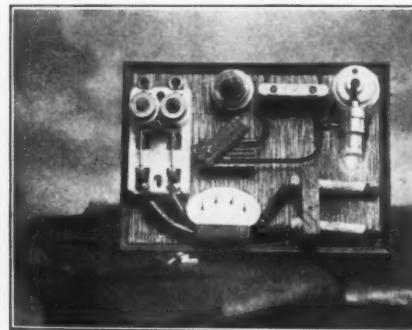
Each "hat" was displayed on a regular millinery pedestal and the setting was attractively arranged. For other dealers who can reconcile themselves to take such a mean and seasonable advantage of the ladies, this idea has great possibilities for the exercise of originality and ingenuity.

A Salesman's Model to Demonstrate House Wiring to the New Prospect

By H. V. ELDRIDGE

Penn Public Service Company,
Clearfield, Pa.

When we go to sell lamps to a merchant we take a lamp along to demonstrate with; then why not take wiring material to show the prospective customer what he is getting? He does not know what size holes you are going to put in his plaster, or



A "house-wiring demonstration set" that helps to show the owner how service is installed. It shows samples of molding and cleat-and-tube work, even to the meter dial borrowed from an old meter.

through the joists, or how much room that entrance switch is going to take up in his kitchen.

In making up a house-wiring demonstration set to show to customers I took a piece of beaver board 9 in. by 12 in., and put two small tubes in the right-hand corner to represent the entrance of the service. Below the tubes I mounted an entrance switch and the dial from an old meter. From the switch I ran No. 14 wire in loom under the meter dial and through two tubes set in a small block of wood to represent a joist. From there the wire went to the back of the board and was brought out at a rosette and socket at the top. I then fastened a flashlight lamp in the socket with tape and by placing a small battery back of my entrance leads it is possible to light the lamp in the socket. In this way I can show my prospect just how electricity enters his house and how he has it under his control through the use of the entrance switch; also I am able to demonstrate the use of fuse plugs in an intelligent manner. I also added a cleat, with wire running through it, to a piece of molding, leaving the cap of the molding loose. This shows both molding and cleat

work, and with a snap switch fastened on the board, but not connected, my demonstrating outfit is complete and fits nicely in my satchel. The whole outfit weighs about 8 lb.

Artistic Design and the Sale of Lighting Fixtures

In an address before the Illuminating Engineering Society, Paul L. Zoellner pointed out that in the last few years the makers of lighting fixtures have come to realize the need for artistic design.

"Perhaps in no other line of manufacture," said Mr. Zoellner, "have such great strides been made in the last ten or fifteen years; perhaps in no other line was the development so lacking and so needed.

MORE ATTENTION TO DESIGN

"Let us start at the drawing table. The fact is that in all but a very few factories one scarcely saw or used a drawing table, until recent years. The manufacturers, usually of a mechanical turn of mind, took various parts and assembled them in a more or less practical way, without much thought being given to style or proportion, and the result usually showed it. This lack of design and style was not alone true of the fixtures, but also of lighting fixture glassware.

"To-day I doubt that there is a manufacturing plant that does not employ or consult a designer, or as occasionally happens, copy some real design. For it is far better to give the public a good design than to originate a poor one, although it is singularly true that a poor originator is usually a poor copyist.

KNOWLEDGE OF DESIGN NEEDED IN SELLING

"The manufacturer has learned that the public wants good design and proportion. He has begun to realize that it costs no more in material, and but little more in labor to produce a good-looking article than an ugly one. Raw material will conform itself into graceful, beautiful lines as readily as the opposite.

"Outside of the factory perhaps the greatest need of knowledge of design is in the salesroom. How many salesmen handling fixtures to-day have even a fundamental knowledge of design? Are there many who could tell

a customer who has read the journals and magazines treating on subjects of house and home, the difference between Colonial or Louis XVI? Talking design is most assuredly not 'bunk'; it is really necessary to know the style of the goods you have for sale.

"It is the essence of salesmanship to be conversant with the goods you are selling. If you were buying an article of furniture, a lamp or chandelier, and the salesman could convince you that it was designed in proper proportion and style and correct in its details, and that the article costs no more because of that than does one of nondescript design, is there any doubt which you would select?"

How a Bank Featured Its Electric Sign in Newspaper Advertising

When an alert salesman of the St. Clair County Gas & Electric Company succeeded in convincing the officials of the First National Bank of Belleville, Ill., that an electric sign would be a good business investment, the sign was erected at once.

A waving flag was selected, under which appeared the words, "First Na-



After the installation of this electric sign the bank used a reproduction of it in its newspaper ads

tional Bank." The sign was placed in a prominent position and in a very short time it became a well-known landmark. To capitalize the value of the public's familiarity with the sign, the bank incorporated a reproduction of the flag and lettering in its newspaper advertising.

Record of Lighting Fixture Patents

Design Patents

The following are ALL the design patents pertaining to lighting materials, issued by the U. S. Patent Office between Feb. 27 and March 27, 1917, inclusive:

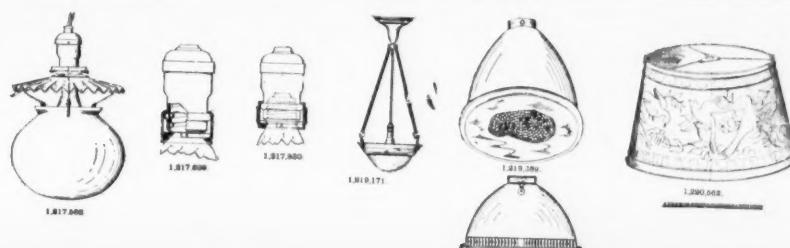
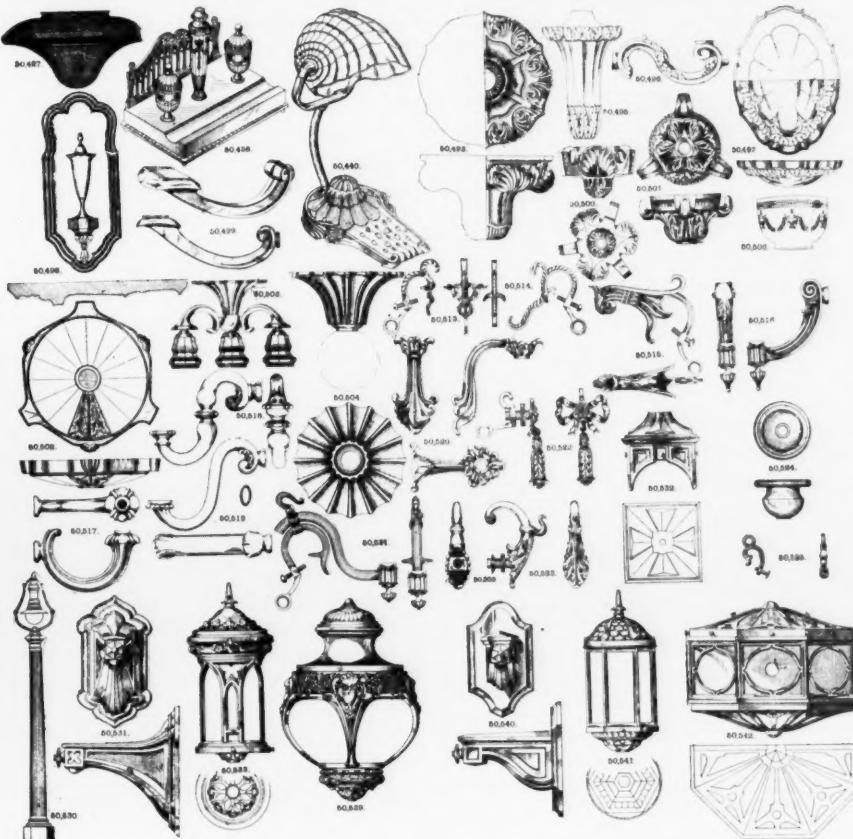
*50,427. **Nitrogen Lamp Unit.** Harry Pickhardt, New York, N. Y., assignor to the Phoenix Glass Company, Pittsburgh, Pa. Filed Nov. 11, 1916. Issued March 6, 1917. Term, seven years.

*50,438. **Combined Lamp Standard and Desk Article.** Frank Yokel, Pittsburgh, Pa., assignor to the Pittsburgh (Pa.) Lamp, Brass & Glass Company. Filed Dec. 2, 1916. Issued March 6, 1917. Term, three and one-half years.

*50,440. **Combined Desk Lamp and Inkstand.** Frank Yokel, Pittsburgh, Pa., assignor to Pittsburgh (Pa.) Lamp, Brass & Glass Company. Filed Dec. 2, 1916. Issued March 6, 1917. Term, three and one-half years.

*50,493. **Ceiling Canopy for Lighting Fixtures.** Robert Y. Barrows, Rutherford, and George V. Strahan, Newark, N. J., assignors to the Mitchell Vance Company, New York, N. Y. Filed Jan. 20, 1917. Issued March 27, 1917. Term, seven years.

*50,495. **Spindle for Lighting Fixtures.**



Copies of illustrations and specifications of any of these patents may be obtained from the Commissioner of Patents, Washington, D. C., for five cents each

signors to the Mitchell Vance Company, New York, N. Y. Filed Jan. 20, 1917. Issued March 27, 1917. Term, seven years.

*50,496. **Arm for a Lighting Fixture.** Robert Y. Barrows, Rutherford, and George V. Strahan, Newark, N. J., assignors to the Mitchell Vance Company, New York, N. Y. Filed Jan. 20, 1917. Issued March 27, 1917. Term, seven years.

*50,497. *50,498. **Wall Plate for a Lighting Fixture.** Robert Y. Barrows, Rutherford, and George V. Strahan, Newark, N. J., assignors to the Mitchell Vance Company, New York, N. Y. Filed Jan. 20, 1917. Issued March 27, 1917. Term, seven years.

*50,499. **Arm for Lighting Fixtures.** Robert Y. Barrows, Rutherford, and George V. Strahan, Newark, N. J., assignors to the Mitchell Vance Company, New York, N. Y. Filed Jan. 20, 1917. Issued March 27, 1917. Term, seven years.

*50,500. *50,501. **Hanger for Lighting Fixtures.** Robert Y. Barrows, Rutherford, and George V. Strahan, Newark, N. J., assignors to the Mitchell Vance Company, New York, N. Y. Filed Jan. 20, 1917. Issued March 27, 1917. Term, seven years.

*50,502. **Ceiling Plate for a Lighting Fixture.** Robert Y. Barrows, Rutherford, and George V. Strahan, Newark, N. J., assignors to the Mitchell Vance Company, New York, N. Y. Filed Jan. 20, 1917. Issued March 27, 1917. Term, seven years.

*50,503. **Candle Arm for Light Reflecting Bowls.** Charles Ernest Jones, Chicago, Ill. Filed Feb. 5, 1917. Issued March 27, 1917. Term, three and one-half years.

*50,514. *50,543. **Clamp for Light Reflecting Bowls.** Charles Ernest Jones, Chicago, Ill. Filed Feb. 5, 1917. Issued March 27, 1917. Term, three and one-half years.

*50,515. **Candle Arm for Light Reflecting Bowls.** Charles Ernest Jones, Chicago, Ill. Filed Feb. 5, 1917. Issued March 27, 1917. Term, three and one-half years.

*50,516. *50,517. *50,518. *50,519. *50,520. **Arm for Chandlers and Brackets.** Charles Ernest Jones, Chicago, Ill. Filed Feb. 9, 1917. Issued March 27, 1917. Term, three and one-half years.

*50,521. **Clamp and Candle Arm for Light Reflecting Bowls.** Charles Ernest Jones, Chicago, Ill. Filed Feb. 12, 1917. Issued March 27, 1917. Term, three and one-half years.

*50,522. **Hanger for Light Reflecting Bowls.** Charles Ernest Jones, Chicago, Ill. Filed Feb. 12, 1917. Issued March 27, 1917. Term, three and one-half years.

*50,523. **Hanger for Light Reflecting Bowls.** Charles Ernest Jones, Chicago, Ill. Filed Feb. 12, 1917. Issued March 27, 1917. Term, three and one-half years.

*50,524. **Candle Cup for Lighting Fixtures.** Walter R. Kahns, Chicago, Ill., assignor to J. H. White Manufacturing Company, Brooklyn, N. Y. Filed Feb. 14, 1917. Issued March 27, 1917. Term, seven years.

*50,525. **Hanger Hook for Light Reflecting Bowls.** Walter R. Kahns, Chicago, Ill., assignor to J. H. White Manufacturing Company, Brooklyn, N. Y. Filed Feb. 14, 1917. Issued March 27, 1917. Term, seven years.

*50,530. **Lighting Standard and Lamp.** Henry A. Landwehr, Los Angeles, Cal. Filed Dec. 4, 1916. Issued March 27, 1917. Term, fourteen years.

*50,531. **Bracket Back for Lighting Fixtures.** Paul Mohrmann, Chicago, Ill., assignor to the Friedley-Voshardt Company, Chicago, Ill. Filed Dec. 30, 1916. Issued March 27, 1917. Term, seven years.

*50,532. *50,533. **Lighting Fixtures.** Paul Mohrmann, Chicago, Ill., assignor to the Friedley-Voshardt Company, Chicago, Ill. Filed Dec. 30, 1916. Issued March 27, 1917. Term, seven years.

*50,539. **Lighting Fixture.** Lester R. Wellman, Chicago, Ill., assignor to the Friedley-Voshardt Company, Chicago, Ill. Filed Dec. 30, 1916. Issued March 27, 1917. Term, seven years.

*50,540. **Bracket Back for Lighting Fixtures.** Lester R. Wellman, Chicago, Ill., assignor to the Friedley-Voshardt Company, Chicago, Ill. Filed Dec. 30, 1916. Issued March 27, 1917. Term, seven years.

*50,541. *50,542. **Lighting Fixture.** Lester R. Wellman, Chicago, Ill., assignor to the Friedley-Voshardt Company, Chicago, Ill. Filed Dec. 30, 1916. Issued March 27, 1917. Term, seven years.

Structural Patents

*1,217,582. **Electric Light Shade.** George Elias, Irvington, and William Mendel, Newark, N. J. Filed April 3, 1916. Issued Feb 27, 1917.

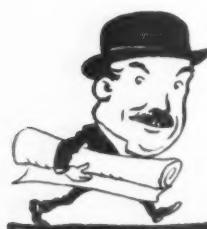
*1,217,829. **Lamp Lock.** Joseph Sachs, Hartford, Conn., assignor to the Hart & Hegeman Manufacturing Company, Hartford, Conn. Filed Feb. 24, 1913. Issued Feb. 27, 1917.

*1,217,830. **Lock for Incandescent Lamp Structures.** Joseph Sachs, Hartford, Conn., assignor to the Hart & Hegeman Manufacturing Company, Hartford, Conn. Filed Feb. 24, 1913. Issued Feb. 27, 1917.

*1,219,171. **Chandelier.** Moritz D. Schwartz, New York, N. Y. Filed Oct. 2, 1916. Issued March 13, 1917.

*1,219,389. **Lighting Apparatus.** Theodore G. Griggs, Chatham, and Allen A. Dittmar, Elmora, N. J. Filed Jan. 13, 1916. Issued March 13, 1917.

*1,220,562. **Light Shade.** Michael Ronayne, New York, N. Y. Filed Oct. 26, 1916. Issued March 27, 1917.



HINTS FOR THE CONTRACTOR

Ideas on Estimating, Stock Keeping, Shop and Construction Methods, and Collections

How Missouri Contractors Develop Lamp and Appliance Business

Contractors attending the annual meeting of the Missouri Electrical Contractors Association, Kansas City, took part in a lively discussion to urge fellow members to build up a good wiring and appliance business.

B. C. Thayer of the American Electric Company, St. Joseph, Mo., said that his company had made its contracting business the feeder for its lamp and appliance business—and now the latter is two or three times the volume of the contracting business. This company sends salesmen to every wiring customer—and invariably sells one or more items in this way.

R. B. Randall, a contractor of Kansas City, pointed out that his business in lamps has grown remarkably—entirely through service, and not at all through price. He said that his company is able to get good contracts for lamps, through the service which it is able to show the customer it can provide.

Several expressed the opinion that the electrical contractor can offset almost any adverse condition by hard work and by attention to details of service. Most of those present, however, were eager to see closer attention to list prices, and better discounts from the manufacturers.

Showing Three Ages of House Lighting

Strictly speaking, a house using kerosene lamps is "lighted." So is one using gas—but the real meaning of the term is exemplified only in a house using electric light throughout.

An exhibit which brought out such a comparison of systems was set up by the Beltzhoover Electric Company at the Cincinnati electric show this year. Three miniature houses were shown lighted from within, signs calling attention to the fact that the best



These model houses were lighted from within and preached the doctrine of electric illumination to many visitors at the Cincinnati electric show

and most brilliant of illuminations is supplied electrically. The well-made little houses served to attract many visitors to the booth, where a complete line of lighting fixtures was attractively displayed.



Restoring Rectifier to Service

Rectifiers in use for charging electric vehicles and storage batteries and for operating moving-picture machines, occasionally go out of business through the burning out of the starting resistance on the non-automatic machine or the tripping coil used on the automatic machine, which also acts as a starting resistance. An emergency or quick repair can be made when this happens to either machine by inserting three dry cells in series across the two lower terminals of the bulb and mechanically rocking the tube. The batteries serve as a resistance, and will start the tube on its first tip. The cells should then be disconnected.

Toledo Contractor Tells Why He Favors Liberal Wire Sizes

"In my opinion, the sizes of copper feeders should not be reduced. I favor increasing the sizes," said J. J. Duck of the Electrical Construction Company of Toledo, in a discussion on the relation of connected load to feeder sizes. "My experience has been that the customer usually overloads branch circuits and then has additional branch circuits installed. The result is that he overloads the feeder circuits.

"Hundreds of small residences are wired for two or three lamps in the living room and dining room; then when the fixtures are selected, the customer often buys four-lamp or five-lamp fixtures. Then he decides to buy a vacuum cleaner, electric iron, toaster, washing machine, etc., and usually receives, as Christmas gifts, three or four portable or boudoir lamps. I know this to be a fact, as January is our busiest time installing base plugs for such devices. The store that is wired with 200-watt or 300-watt outlets will usually contain when finished 500-watt or 750-watt lamps in those outlets.

"In schools and churches where bazaars are held during the year, the feeders supplying the connected load are never too large to take care of the extra lighting for such affairs. Often a 50-amp. stereopticon or moving-picture machine is installed for temporary use.

"I believe there is always a chance to split up branch circuits, if the condition warrants. But this remedy cannot be applied to feeders which are too small, without considerable expense. In other words, No. 14 wire can be handled and fished much more easily than No. 8, 6 or 4. The cost of 100 ft. of No. 3 strand at 37-cent base, at a discount of 40 per cent, is \$15.96 net per 100 ft.; No. 4 strand under the same conditions costs \$13.25; No. 6 strand, \$9.32. The difference in cost of No. 4 over No. 6 is \$3.91 per 100 ft.; the increased carrying capacity is 20 amp.

"Likewise the difference between No. 3 and No. 6 is only \$6.64 per 100 ft., and the decreased carrying capacity is 30 amp. Any of these wire sizes made up in three-conductor strand can be installed in a 1.25-in. pipe. The difference in cost is slight but the difference in carrying capacity is appreciable. The tendency, there-

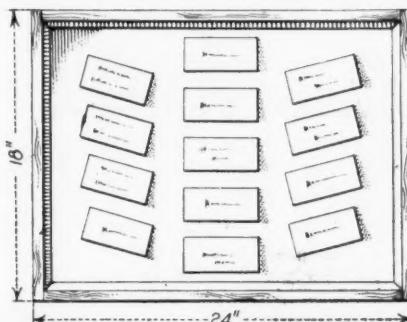
fore, should be toward the use of the larger sizes.

"A contractor, however, must satisfy the owner, the architect, the engineer, the fixture company, the service company and also the electrical inspector, and then collect his surplus. Consequently if we are to have less copper on a job, the contractor will have some more explaining to do to the owner, and a less satisfied customer. My idea is to do a good job and have the customer satisfied forever, in spite of the fact that less copper means more additional work for the contractor within the year.

"I cannot understand why the people interested in the electrical business are always trying to make the job cheaper. In plumbing they use brass pipe in place of galvanized. In the electrical business we buy stamped steel switch plates, brass plated. We will soon be using concentric wire and No. 14 iron wire in order to cheapen the job. In other trades the slogan is, 'Can you do a better job?' while our slogan seems to be, 'Can you do a cheaper job?' The reason for it all is that the customer is not educated to the advantages of the better way. He finds nobody talking quality, but everybody talking quantity. To correct the evil there will have to be a reversal of this line of talk."

Directory of Contractors in Show Window

A neat bulletin board on which all the local electrical contractors are invited to post their business cards is kept in the show window of the Public Service Electric Company at Orange, N. J. When a customer asks the company to recommend a contractor to him he is referred to the directory.



Business cards of all local electrical contractors are displayed in the window of the Public Service Electric Company at Orange, N. J.

All-Night Signs A Good Ad

In towns where the window lights are turned off at 10 or 11 o'clock, it is a good scheme for the electrical dealer and contractor to keep burning in his window an all-night transparency. The cost of such a sign is insignificant as it can be run by a skeedoodle plug and burns very little electricity. The simplest form of such a sign is the dealer's name, but effective use can be made of a transparency box having a changeable front panel on which special announcements are inserted from time to time. Also, it is an excellent medium for emphasizing the Society for Electrical Development's slogan—"Do It Electrically."

Does It Pay the Electrical Dealer to Sell Hardware?

It does! declares John J. Finn, who a number of years ago opened up a small electric supply store at the corner of Sixth Avenue and Thirty-Seventh Street, New York City, and who is still at this same location and doing a good business, too. Mr. Finn, who was himself an electrician, found, soon after starting into the electrical supply business, that when an electrician walked into the store for electrical supplies he often also inquired about carpenters' tools, such as a chisel, screwdriver or hammer, and sometimes called for wood screws, nails, putty, and even padlocks and other hardware. As inquiries were received for these things, Mr. Finn put them in stock and before long his store contained a fair-sized stock of hardware supplies.

As this stock grew he placed some of it in his show window and hung below the "Electric Supplies" sign, a second sign reading "Hardware." To his surprise he found that many transient customers who entered his store to buy light hardware saw his display of electrical supplies and devices and as a result he sold a large number of flashlights, fans, suction sweepers, lamps, and other appliances. Furthermore, these hardware customers often purchased small wiring supplies.

This experience, according to Jack Finn, showed that for a small store it is desirable to carry both hardware and electrical supplies. He expects soon to move into larger quarters and he declares that in his new store he will have two show windows, with the

entrance between them. In one window he will display only hardware and in the other electrical supplies and devices. His experience also shows, he says, that it pays to have the "allied lines in showcases sort of mixed up, so that a buyer of one line cannot help but see samples of the other."

Contractors Co-operated with Central Station on House-Wiring Campaign

The Portland (Ore.) Railway, Light & Power Company conducted a house-wiring campaign in co-operation with some thirty contractors during house-wiring month last year.

Lists of prospects with unwired premises were furnished to the contractors, and 55 per cent of the jobs were carried by the company on a time-payment basis, the company paying the contractors cash in each case upon completion of the work.

During the campaign the company offered an electric iron to each consumer signing a two-year lighting contract, with the result that 75 per cent of the new customers signed such contracts.

Throughout the campaign it was brought home to Portland contractors that there was plenty of business worth going after in old houses.

IS YOURS A REAL HOME OR JUST A HOUSE?

Electric Service Makes the Difference
No House TOO OLD, TOO LARGE
or TOO SMALL to be Wired
for ELECTRICITY

DO IT NOW

Special inducements and very easy payments during
"WIRE-YOUR-HOME" MONTH
March 15, April 15

We will wire your home without interfering with your
comfort while the work is being done.

Write, call or phone any of the following reliable concerns.

Portland Railways, Light & Power Company	Electric Bldg.
Beaver Electric Co.	4526 46th Ave. S. E.
Bethel Electric Co.	164 E. 12th St.
Claggett Electric Co.	482 Morrison St.
Crescent Electric Co.	49 Union Ave. N.
Dremont Electric Co.	119 W. 12th St. & 13th Ave
Ellis Electric Co.	127 Grand Ave.
Grand Electric Co.	1989½ East Stark St.
F. M. Harmon Electric Co.	6015 Foster Road.
Kern Park Electric Co.	83 John St.
J. L. Johnson Co.	449 Washington St.
E. L. Knight & Co.	245 Alder St.
The Light House	111 West Park St.
Morrison Electric Co.	201 Morrison St.
McDonald Electric Co.	296 Oak St.
Pierce-Tomlinson Electric Co.	286 Yamhill St.
Portland Gas & Electric Appliance Co.	1570 East 13th St.
Selwood Electric Co.	211 Yamhill St.
Smith-McCoy Electric Co.	571 Washington St.
Sturges & Olaser	264 Cleveland St.
P. G. Strom	1461 Cleveland Ave.
Vanderbilt & Lord	221 Yamhill St.
Union Electric Co.	319 Union Ave.
Walker Electric Co.	10th & Burnside Sts.
M. J. Walsh & Co.	311 Stark St.

"Electric Service Means a Modern Home"

Watch the Papers for Further Details

Circular giving contractors' names and addresses in housewiring campaign at Portland, Ore.

SALES HELPS FOR THE DEALER



What the Manufacturer Offers to Help You Get More Trade



Double Use from Manufacturers' Cut-Outs

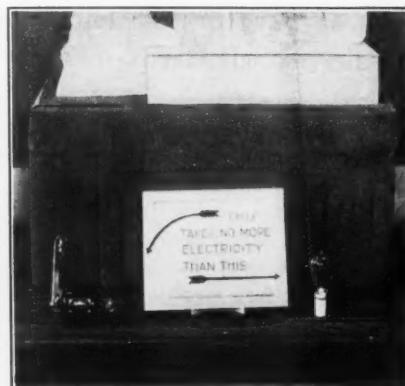
Lithographed cut-outs furnished by electrical manufacturers for special window displays can frequently be used over and over again. It is a mistake to toss them away after they have been employed in the single trim for which they were designed. One of the displays submitted in a competition conducted by the Hurley Machine Company, manufacturer of the Thor washer, had as its central feature a cut-out of a young couple inspecting with satisfaction the operation of the machine. This cut-out was originally designed for a display of Hot-Point appliances, but after serving its original purpose it was used to such good advantage in the washing machine window that the display took second prize in the competition to which it was submitted. Little space is required to store such cut-outs and they are certain to be useful later.



The cardboard "cut-out" of the two figures in this washing-machine window has been ingeniously adapted from a previously used display of electric heating appliances.

The Economical Sewing Machine Motor

Most people have a very wrong idea of the amount of electricity required to operate motor devices, such as fans, sewing machines, vacuum cleaners, etc. Indeed, the impression is quite



Window display featuring sewing machine motor, which consumes only the same amount of electricity as a 40-watt bulb.

prevalent among the public that any motor—large or small—consumes a good deal of electricity to run it. To correct this idea the Westinghouse company in one of its "Sew-Motor" window-display suggestions issued for the benefit of dealers, has arranged to compare the electricity consumption of the motor with that of a 40-watt electric-light bulb.

* * * *

Landers, Frary & Clark of New Britain, Conn., have announced the list of awards, just handed down by the judges in their Christmas window-trimming contest, as follows: First prize of \$50, Public Service Company of Northern Illinois, Oak Park, Ill.; second prize of \$25, Ottawa (Ont.) Electric Company; third prize of \$10, Syracuse (N. Y.) Lighting Company. Twenty-four other central station companies and dealers were given honorable mention, each window trimmer receiving an attractive souvenir.

Manufacturer's Co-operative Day-Load Bureau

In line with the efforts put forth by electrical appliance manufacturers to assist dealers in marketing such devices, the Hotpoint Electric Heating Company of Ontario, Cal., Chicago and New York, offers from its co-operative department and day-load bureau, which are maintained for dealer and lighting company service, many special free features in the way of newspaper copy, advertising, cuts, window displays, window trimming material and folders.

This service is availed of by nearly 10,000 central stations and dealers handling electrical appliances, and during 1916 more than 6,000,000 pieces of printed literature for use to the consumer were distributed free of charge, in addition to the hundreds of special campaigns in which the service of the advertising department of the Hotpoint company was given free.

A "Play Way" Electric Cleaner Folder

"Her House in Order" is the title of an eight-page folder on electric cleaners which has just been issued by the Frantz Premier Company of Cleveland, Ohio. Its attractive illustrations in color and very readable text insure it more than a passing glance at the hands of the casual reader. The dealer's imprint is carried on the cover.



A Page from "Her House in Order," the Frantz Premier Company's New Folder

FAN SELLING HELPS FOR THE ASKING

Manufacturers Ready with Everything from Complete Merchandising Campaigns to Lantern Slides and Window Cards

This is the season when the retail dealer is getting ready for his summer drive on fans.

But whether his sales these next four months will be confined to an occasional "hot-day" rush with slack intervals between, or expanded into a steady, week-in-and-week-out demand for fans will depend largely upon the use he makes of the generous selling helps the fan-makers now offer him.

Several of the larger manufacturers have developed elaborate fan-cam-

the use of printed advertising matter and lantern slides. Representatives of the Society for Electrical Development, the National Electrical Contractors Association, and ELECTRICAL MERCHANDISING have, among others, been asked to serve on the board of judges.

"More Dollars for G. E. Fan Dealers—A Rapid-Fire Sales Campaign" is the inviting title of the booklet issued by the General Electric Company which describes the work it is doing

customers in the general magazines, and also offers dealers specially-prepared sales helps for their own use in their own communities.

The A. C. Gilbert Company, New Haven, Conn., features its "Polar Cub" trade-mark in various attractive window-display cut-outs, price tags and folders, and offers to dealers free on request salesmaking store display material.

Space forbids, of course, enumerating all the excellent dealer helps that the fan manufacturers are offering, but practically every one of the two-dozen fan makers is prepared to help the retailer in some way, and the instances cited are merely representative of the practical selling co-operation which the electrical merchant can obtain by calling on the manufacturers for concrete help.

In fact, the dealer has only to "ask and it will be given him."

**MAKE 1917 THE
BEST EVER FOR
FAN SALES**

Line up to pull more fans and enter
the merchandising contest.

To encourage progress in merchandising the Western
Electric Company offers cash prizes to the dealers that submit
what is considered to be the best all around fan sales campaign.

The board of judges will be made up of representatives of:
Electrical Mechanic National Electrical Contractors
Electrical Review Electrical Record
General World Electrical Age
The Society for Electrical Development.

The following factors will be the basis upon which the awards will be
made, and the relative values (points) allotted are as follows:

- Western Double - 100
- Mobile - 100
- Point of Sale - 100
- Local newspaper advertising - 100
- Local radio advertising - 100
- Local fan display - 100
- Local fan display in local news papers - 100
- Interest in T.O.T. for business over 1916 - 100
- Interest in T.O.T. for business under 1916 - 100

The following rules will govern the contest:

- Western Double - 100
- The "Intermerchandiser" will be the Western Double.
- Point of Sale - 100
- Local newspaper advertising - 100
- Local radio advertising - 100
- Local fan display - 100
- Local fan display in local news papers - 100
- Interest in T.O.T. for business over 1916 - 100
- Interest in T.O.T. for business under 1916 - 100

USE THE ENCLOSED CARD TO ASK FOR ENTRY BLANK

USE THESE SALES HELPS—THEY WILL HELP YOU SELL FANS

Check the help you want on the enclosed card and mail today
We furnish them without cost to you



ELECTROTYPE OF FAN

F-57 and F-58 illustrate the new Western Electric Six Inch Fan. F-59 illustrates the new Western Electric Oscillating Fan. F-60 illustrates the Western Electric Desk and Bracket Fan. We will break up or sell all of these newspaper electrotypes to you.



DISPLAY CARDS

These attractive colored cards are for use in
your window, on your counter, or can be used in
your room. Angle space a lot for your name
and address and your telephone number.



BOOKLET

The booklet is nothing but made and cut out
to be used as a "cover" and not bound out
permanently. We will furnish them reprinted
with your name and address.



FOLDER

This folder tells all about Western Electric
fans. It is a good folder to keep in the front
of your counter. It is a good folder to keep
in the hand of your men when they call
on you. It is a good folder to keep in
your room.

RUN THESE ADS IN YOUR LOCAL NEWSPAPERS

WE WILL PRINT FOR YOU ELECTROTYPE OF ANY OR ALL OF
THESE FIVE—INDICATE YOUR CHOICE ON THE ENCLOSED CARD



LANTERN SLIDES

Use these slides in your local news paper
Slide 13,549 tells all about the Western
Electric Oscillating Fan. We will furnish
the slides free with your name and
address on them. You can use the
headline card and check the slides you wish.



LANTERN SLIDES

Slide 13,549 tells all about the Western
Electric Oscillating Fan. We will furnish
the slides free with your name and
address on them. You can use the
headline card and check the slides you wish.

The liberal offer which one fan distributor makes to electrical dealers, as outlined on a broadside sent to the retail trade. Note that not only is all necessary advertising material on furnished gratis to the dealer but that in addition goodly cash prizes have been set aside by the distributor to make it worth the dealer's while to better his merchandising methods.

paign plans which are the dealer's for the asking. Folders, blotters, post-cards, lantern slides and newspaper ads are also ready in quantities. And the electrical merchant who overlooks this opportunity to reinforce his own selling effort with the best thought of some of the most expensive merchandising talent in America, will be passing up some of the richest offerings of the summer selling harvest.

The Western Electric Company, for example, besides offering free to every dealer the benefit of the ideas in its elaborate campaign of fan selling helps, has gone even further and provided cash prizes, totalling \$200, for the best fan-selling campaign executed by a dealer. In this unique contest the awards will be based on the general selling methods used, including such factors as window displays, house-canvassing methods, increase of 1917 fan business over 1916, and

to aid retail sellers of its fans. Detail suggestions for the conduct of the selling drive are given under the heading "The How and Why" of a fan campaign. The attractive customer literature which forms a part of the campaign, includes booklets, folders, postcards and blotters, besides newspaper advertisements and lantern slides.

This year the Westinghouse Company will use a combination campaign on fans and heating appliances. Among the company's printed helps are folders directed to the residence prospect and the business man, newspaper electrotypes, street car cards, and posters. Window-display suggestions and special display stands will also be available for the dealer.

The Robbins & Myers Company, Springfield, Ohio, lays emphasis on its plan of helping the dealer sell fans through popular advertising to

Vibrators Among Best Application Sellers in Brooklyn

The appliance business of the Brooklyn Edison Company for the first two months of 1917 has shown a marked increase over the corresponding two months of 1916. The percentage increase in gross sales for these two months in 1917 was 34 per cent over the corresponding two months in 1916. The number of articles sold during this period in 1917 was 1769 as against 1081 in 1916, an increase of 63 per cent. The wattage of appliances sold during the same period was 312,000 or 30 per cent better than in 1916.

These increases were quite general throughout nearly all the different classes of appliances with a few exceptions, notably 250 vibrators in 1917 against nine in 1916, 206 heating pads against ninety-five in 1916. Three times as many vacuum cleaners and six times as many washing machines were sold in 1917 as in 1916.

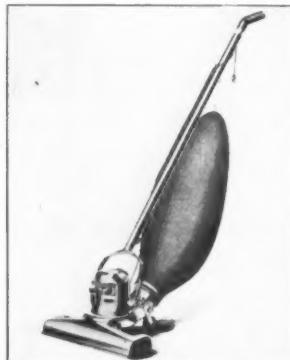
"The Monthly Handshake" of the Harvey Hubbell Company, which has just made its appearance, is called *The Hubbellite*. Besides notes and illustrations on new fixtures the little magazine carries some snappy text matter, and its cultural qualities are rounded out by real verse with lines that fit like the snap-cover on a lamp socket.

NEW MERCHANDISE TO SELL AND WHERE TO BUY IT

Appliances, Socket Devices and Wiring Supplies Which
Manufacturers and Jobbers Are Putting on the Market

Spiral-Brush Vacuum Cleaner

An electric vacuum cleaner that combines air suction with the use of a brush on which the bristles are spirally ar-

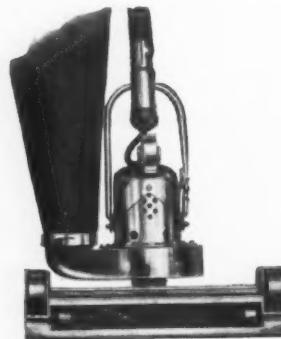


Electric cleaner with spiral brush

ranged is being placed on the market by the United Electric Company of Canton, Ohio. The motor used is $\frac{1}{6}$ -hp., designed to drive the fan at 10,000 r.p.m. Shock danger is avoided by the use of an all-fiber handle.

An Easy Running Electric Cleaner

It is by no means necessary to sacrifice the dirt-gathering qualities of a vacuum cleaner in order to make it easy to operate. The elimination of everything which may cause undue exertion



Easy running vacuum cleaner with steel nozzle

has been one of the objects of the National Sweeper Company of Torrington, Conn., in producing the machine here illustrated.

The motor used is a General Electric 0.5-hp. 8000 r.p.m., 60 cycles, 110 volt, and may be used on either direct or

alternating current. An 8.25-in. brush is used in the nozzle and is connected to run opposite to the motion of the cleaner. Since aluminum is said to have a tendency to "gray" light colored rugs and carpets, steel is used in the nozzle, which is 12.25 in. in width. The handle is held upright by a special device, and carries the switch conveniently located in the end.

Electric Player Piano

The player piano illustrated may be played by hand, operated by treadle or electrically operated. When operated electrically, a small Westinghouse motor is employed, belted to a wheel controlling the air motor. When used as a player piano only three levers and three buttons on the front rail need be



This piano may be played electrically, by treadle, or by hand

manipulated. The piano is made by Jacob Doll & Sons, Inc., 98-116 Southern Boulevard, New York City. The entire action of the piano may be removed, affording unhindered approach to the piano section for regulation and tuning. All parts of the pneumatic mechanism likely to need regulation or replacement are in front of the action structure.

Automobile Fuses

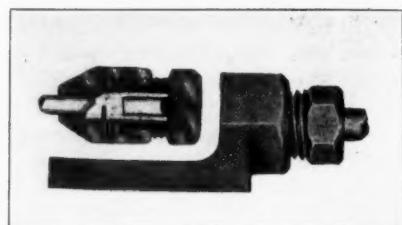
A large variety of fuses for the starting and lighting circuits of automobiles is required to accommodate the many designs of cars.

Dealers have some trouble in determining what type amperages and quantities of fuses they should have in order to carry as little slow-moving stock as possible, and to assist them auto fuses are now furnished in three assortments, known as Nos. 1, 2 and 3, and containing respectively 100, 150 and 200 fuses, selected with a view toward meeting average requirements and packed in a

case with compartments for the various sizes. Complete details can be secured from auto jobbers or from the Chicago Fuse Manufacturing Company, Chicago or New York.

Solderless Connectors

Solderless connectors manufactured by the Fargo Manufacturing Company of Poughkeepsie, N. Y., for joining solid or stranded wires and cables are shown in the accompanying illustration. These



Top—Two-way connector; bottom—terminal solderless connector

connectors are used for splicing conductors of all sizes end to end, and forming a cold-weld solderless connection. The type shown on top grips the wires, cables or solid rods the full length of a 15-deg. taper and is firmly compressed about them. The conductors are held in place by a nut with a 15-deg. taper which insures a good contact over its entire surface.

Terminal connectors like the one shown on the bottom are made for connecting cables and wires to flat busbars or front-connected switches.

Universal Watt-Hour Meter Box

A new type of watt-hour meter box is being offered to the trade by the James E. Gleason Company, 106 South Clinton Street, Chicago. The advantages claimed for this device are that with a few terminal fittings it takes the place of thirty-five different styles of similar boxes. Furthermore, the fittings and



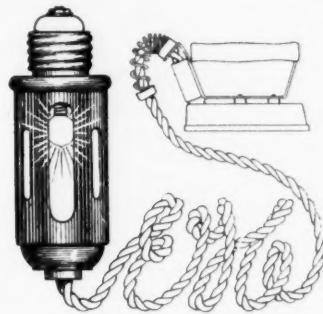
Exploded view of box

the ends of the box are so arranged that the different parts are interchangeable, making it possible to change the direction of feed through the box by changing the relative position of the different terminal fittings. The box has the additional advantage that it can be sealed

to protect the service against unauthorized connection. The exploded view of the device herewith shows the interchangeable terminal fittings. The device is being manufactured by the P. & B. Manufacturing Company and is being sold as the "P. & B. Universal Watt-Hour Meter Box."

Safety Signal for Electrical Appliances

A device that shows at all times whether or not an appliance is turned on is being manufactured by the Electric Signal Company, 1307 Sutter Street,



Pilot light for appliances

San Francisco, Cal. The signal is in the form of pilot light mounted in a brass case 4 in. in length.

Electric Hand Lantern

An alkaline storage battery is employed to operate the electric hand lantern shown in the accompanying illustration. The bulb support is designed so that if the lens is broken the lamp bulb will be knocked off its supports and the circuit broken before the filament can be exposed, thus preventing an explosion in case the lamp is being used where inflammable gases exist. The glass which is used is very thick and is annealed so that it cannot be easily broken. Enough electrolyte can be prepared from one pound of the battery compound to operate one lantern



Portable electric safety lantern

constantly for four months. Soft rubber cover gaskets are used, which, while permitting the gases to escape, prevent the leakage of solution, should the lantern be overturned. The lamp is made by the Portable Electric Safety Light Company, Newark, N. J.

Lighting Unit for Comparison of Colors

The St. Louis Brass Manufacturing Company is producing a new unit which it offers for color-matching use. One form of this lamp is the portable type illustrated here. The light employed is derived from a standard 60-watt Mazda lamp, its modification by selective absorption being accomplished by contact of the light rays with the glass, rather than by penetration as in other color-matching units. The arrangement of the glass strips is also unique. They are disposed at a fixed angle to a line passing through the axis of the lamp and at a uniform radial distance in such manner that the emitted light must in all cases come in contact with one strip of glass from which it is reflected to the working plane.

A particularly interesting feature of



Portable form of new lighting unit for comparing colors

the unit is that by the light which is emitted it is possible to see at a glance the basic hue of any color, as for instance, blue. Two blue samples may apparently match perfectly, but when carefully examined it may be found that the basic hue of one is green, while that of the other is purple. This difference, it is asserted, is very apparent under the light from the new unit, and as a consequence much dissatisfaction may be eliminated by securing a perfect match of basic hues as well as superficial colors.

Luminous Attachment for Sockets and Switches

A luminous attachment designed to locate pull-socket chains and flush-plate switches by means of the luminous ray emitted from its radium composition, has been placed on the market by the General Electric Company, Schenectady, N. Y., under the name of "Radieye." Since the luminant is a composition containing a radium compound, the light

is permanent and no recharging is necessary. The radium is protected by glass, while the attachment itself has a brass body, which affords additional protection.

If used with a pull-chain attachment the device is substituted for the usual ball at the end of the chain. When used with a flush-plate switch the luminous unit is substituted for one of the screws which attach the plate to the wall.

Immersion Heater

The heating unit of the immersion heater shown in the accompanying illustration is permanently embedded in cement under heavy pressure, the use of



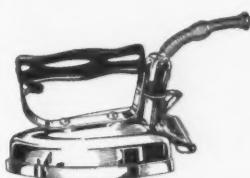
Disk-base immersion heater

mica being entirely avoided. The heater is neat in appearance, has a round 3-in. base and weighs 11 oz. with plug and cord. The handle is always cool, it is claimed. Each heater is equipped with a 6-ft. detachable cord and two-piece connection plug. The Sterling Corporation of Cleveland, Ohio, is the manufacturer of this heater.

Electric Iron with Cord Protector and Thumb Rest

Cord breakage in electric irons has been a source of trouble to customers, dealers and manufacturers, but the Hot-point Electric Heating Company of Ontario, Cal., has recently developed a hinged cord-protector switch plug which, it is claimed, will prevent such cord difficulties.

The cord passes through a smooth composition bushing at the upper end of a spiral spring, which prevents chafing at that point. It continues on through



Electric iron with thumb rest and cord protection

the spring, the ends of which are securely fastened to the slide hinge joint at the upper part of the metal plug cap. This supports the cord and prevents sharp bends or kinks in it.

The composition plug bar forms an anchor for the cord, which is wrapped

around it in a way to relieve all possible strain from the copper conductor and the fastening to the binding screws.

Another improvement is the thumb rest provided on this new iron. Placing the thumb on this at intervals during the ironing, it is claimed, relieves the wrist.

Straight Connector

A straight connector that is simple and makes a firm twisted joint has been developed by the Fargo Manufacturing Company of Poughkeepsie, N. Y. The air space has been made as small as possible, while the area of contact is large. The large contact surface, to-



Method of using straight connector

gether with twisting the wires, forms a joint of low resistance. This connector is made for wires of sizes ranging from No. 4 to 14.

100-Watt Reading Lamp

A reading lamp primarily designed as a central station load builder and as a device that can be sold in central station campaigns is being offered to the trade by the Uno-lite Company of America, Indianapolis, Ind. The specifications of the lamp are: Length of the base, 7 in.; width of the base, 5 in.; extreme height, 22 in.; diameter of white-lined, green dome, 10 in.; diam-



Reading lamp designed to be equipped with a 100-watt daylight lamp

eter of the milk-white semi-inclosing under globe, 6 in.; standard finish, Japan bronze; recommended lamp equipment, 100-watt, nitrogen-filled, blue-glass daylight lamp.

It is of a style that will harmonize with any period or design of furnishings. The filament of the lamp is entirely hidden from the eye. The white-lined green porcelain shade provides the non-hypnotic feature.

Test Clips

Test clips with which lighting and starting batteries may be charged without disconnecting the batteries from the

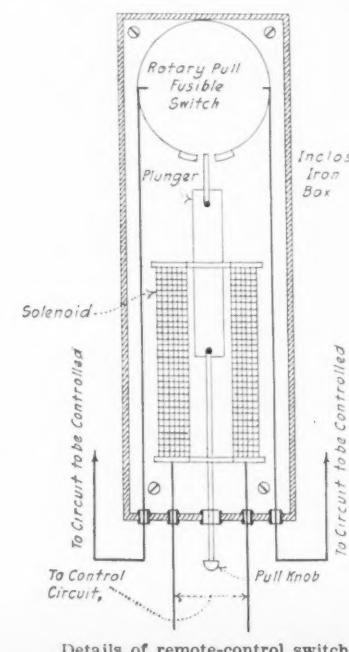


Lead-plated steel test cap

car have been developed by R. S. Mueller & Company, 423 High Street, Cleveland, Ohio. With these clips it is claimed that it is not necessary to clean dirty terminals, as the teeth of the clip bite through the corrosion and make a good contact. The clips are made of lead-plated steel. The clip shown in the accompanying illustration is designed to carry 35 amp., and the jaws have a spread of 1 1/2 in. (3.81 cm.). Other clips are made in 15-amp., 20-amp. and 100-amp. sizes. Rubber insulators for covering the clips are also furnished when specified.

Small-Capacity Remote-Control Switch

A small-capacity remote-control switch, which may be used to operate one or more lamps, motors, or other devices, requiring 10 amp. or less, is being manufactured by the Gardner Electric Manufacturing Company of Bay Point, Cal. These switches can be operated by hand, as well as magnetically, from a push button. The mechanism is inclosed in a weatherproof sheet-iron box, which may be quickly attached to any support. By the use of this switch, it is claimed, elec-

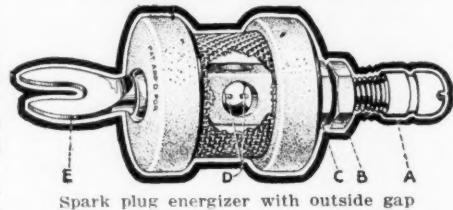


Details of remote-control switch

trical apparatus may be controlled at a distance without a heavy cost for conductors and the copper loss in them.

Auto Spark Plug Energizer

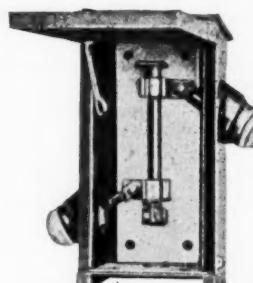
For the purpose of intensifying the ignition spark in gas engine cylinders, the P. S. E. Manufacturing Company of 1777 Broadway, New York City, is making a device providing an auxiliary air gap outside of the cylinder. The new igniter is designed on the theory that the outside gap in series with the spark plug



causes a storing up of energy previous to the "jump" and a "fat" spark when discharge does occur. To prevent accidental explosions in the outside gap due to a collection of gas in the auxiliary gap a Davy wire gage is used to inclose the auxiliary points.

Fused Switch Boxes

Switch boxes particularly adapted to 250-volt, direct-current mill service have been brought out by the D. & W. Fuse Company, Providence, R. I. They may be permanently locked after the fuses are installed, thereby preventing any tampering with the connections or increasing the capacity of the fuses. The circuit can be opened or closed at will without opening the cover by moving the lever at one side of the box. By referring to the illustration it may be seen that when the cover is opened the circuit is



Interior view of "Fuswitch" distribution circuits

likewise opened. This arrangement makes it impossible to re-fuse the circuit when the switch is closed. These boxes are provided with rubber gaskets, which make them waterproof provided the terminal wires are taped at the bushings or protected by outlet hoods when conduit connections are made. To facilitate installing these boxes, removable porcelain bushings may be used through which the cable terminals may be readily passed.

Side-Outlet Service Tap

The Trumbull Electric Manufacturing Company of Plainville, Conn., has joined the movement for standardization of contacts in plugs, receptacles and similar devices and has recently brought out



Service tap for multiple connection

a number of devices that are interchangeable with corresponding products of other makes of "standard" devices. In the accompanying illustration is shown a porcelain side-outlet current tap with standard composition cap. The side outlet is for multiple connection. Another device is a compact separable attachment plug with standard cap.

Outlet-Box Receptacle

Harvey Hubbell, Inc., of Bridgeport, Conn., has redesigned its No. 6103 outlet-box receptacle, incorporating a sub-base which is intended to protect the wires from contact with the box or fitting. Since the wire passages are free from sharp edges or corners, wear on the wire covering and the possibility of accidental short-circuits through the contact of exposed wire with the fitting are minimized. The receptacle is designed for cover mounting, the cover being securely attached between the upper and center porcelain by a single center screw. A leather gasket is furnished between the two pieces of porcelain to allow for variations in separation and assure the rigidity of the cover. The slots are of the standard 1-T type with which all Hubbell 10-amp. caps and lamp receptacles are interchangeable.

Interchangeable Mogul Sockets

The Arrow Electric Company has developed a complete line of porcelain Mogul sockets, made up of interchangeable



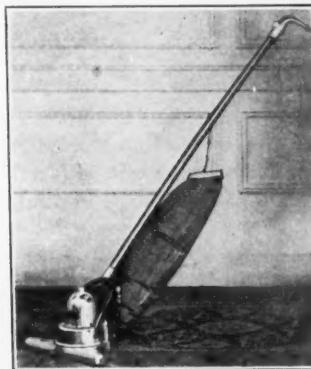
Five Mogul socket bodies interchangeable with nine caps

able units, including five bodies and nine caps. All screw hole spacings are the same (1 5/16 in.), and all attaching screws are the same length and size (11/16 by 10/32 in.). The attaching

screws have pointed ends, which facilitate assembling. The fourteen interchangeable parts make possible forty-five different combinations, which cover all the present types assembled and a number of additional types. With these arrangements it is possible to meet practically any requirement made in actual practice, and the number of pieces required in stock has been reduced from three to one and the investment from seven to one. The parts are packed with five bodies and ten caps to the carton. Standard packages contain fifty units in all cases.

Electric Vacuum Cleaner

One of the new electric vacuum cleaners on the market is the model being made by the Pittsburgh (Pa.) Electric Specialties Company. The machine has an improved dust bag and the conductor



Electric vacuum cleaner with thumb switch in the handle

cord is carried embedded in the handle. A Cutler-Hammer switch is mounted on the handle within easy reach of the operator's thumb. A 14-in. nozzle is used and the cleaner is driven by a universal motor.

Washing and Wringing Machines

The Brokaw-Eden Manufacturing Company of Alton, Ill., has developed an electric washing and wringing machine which has the following features: The machine has an automatic stop button, which when pressed stops the cylinder in the correct position for opening. A slight pull on the button starts the cylinder. Every moving part of the machine is covered, thereby preventing accidents and making it impossible for clothing to catch on any moving parts. When the cylinder doors are open they engage with the sides of the tub in such a manner as to prevent the clothes from dropping down under the cylinder. Another feature of construction is a window with a cross bar to indicate the proper water level. The machine also has a wringer control lever, sanitary zinc cylinder that reverses automatically, and a quick-acting drain cock. A 1/6-hp. Robbins & Meyers motor with automatic release is used.

Combined Vacuum Cleaner and Carpet Sweeper

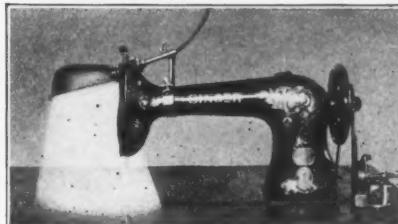
The vacuum cleaner shown in the accompanying illustration contains a revolving brush and a fiber gear drive which, it is claimed, makes the machine both noiseless and efficient. The switch for controlling the cleaner is located directly under the curve in the handle, where it is protected from damage should the handle be allowed to fall. The curved part of the handle is made of highly polished fiber tube closed at the end. This cleaner is the product of the Ramey Company of Columbus, Ohio.



Vacuum cleaner that has a fiber gear drive

Sewing Machine Lamp

Adjustable lighting fixtures that permit applying light directly on work which is being done on sewing machines have been brought out by the Keith Manufacturing Company of Clinton, N. Y. The lamp can be placed instantly in any desired position or as quickly moved out of the way. It is claimed that by the use of these fix-



Lighting fixture used on sewing machine

tures the efficiency of the operator can be increased and that the eyesight troubles which are so often caused by poor lighting can be very greatly minimized.



GOSSIP OF THE TRADE

Annual Meeting Society for Electrical Development

The annual meeting of the Society for Electrical Development, Inc., will be held on May 8 at its offices in the Engineering Societies' Building, New York City. Officers and directors for the ensuing year will be elected and the report of J. M. Wakeman, general manager of the society, will be presented. The society has some comprehensive sales plans to present which are expected to follow up the good work of "America's Electrical Week" and "Wire-Your-Home-Time." The question of holding another electrical week this year, or next spring, will also be discussed at this meeting.

Electrically Cooked Dinner for Salesmen

The sales department of the Minneapolis General Electric Company recently gave a dinner to the salesmen, all of which was prepared electrically on a 4-kw. capacity electric range.

The meal was served in the company's office and twenty-five people were served at a cost of 49 cents per plate for the following menu:

Tomato Soup	
Wafers	
Roast Beef	Baked Potatoes
Escaloped Corn	Apple Sauce
Parker House Rolls	
Combination Salad	
Boiled Mayonnaise Dressing	
Prune Whip	
Coffee	
Cake	
Wafers	

Illuminating Engineering Society Membership Offer

The Illuminating Engineering Society is seeking to enlarge its membership through the enrollment at this time of more persons interested in the application, use and sale of "better lighting," and offers to admit new members for the rest of 1917 upon payment of one-half the regular annual dues in addition to the initiation fee, thus making the total charges \$5

for associates and \$7.50 for active members.

The purpose of the society is "to advance the theory and practice of illuminating engineering," and its membership now numbers about 1300. G. H. Stickney is general secretary of the society, which has offices at 29 West Thirty-ninth Street, New York City.

The N. E. C. A.'s Electrical Merchandising Committee

George Weideman of New York City has been appointed chairman of the newly organized Electrical Merchandising Committee of the Na-



The chairman of the new Electrical Merchandising Committee of the National Electrical Contractors' Association is George E. Weideman of Brooklyn—and this is George. George, by the way, is very camera-shy, and we revised our staff photographer's salary solely on the strength of this achievement.

tional Electrical Contractors' Association, which is getting ready to study retail electrical store problems for N. E. C. A. members. The committee proposes, among other things, to show the advantages of handling electrical goods in a retail way and to help eliminate the unfair competition of sales at cost.

Besides Chairman Weideman its members are W. G. Reuter, Cincinnati, Ohio; L. W. Cleveland, Portland, Me.; A. L. Swanson, Evans-

ville, Ind.; Carl Heilbron, San Diego, Cal.; Rush Brothers, Hot Springs, Ark.; Robert Nickles, Madison, Wis.; E. T. Borden, Houston, Tex., and E. Kunkle, Davenport, Ia.

Four \$3,000 Awards in Ever-Ready Name Contest

As a result of its widely heralded name contest, the American Ever-Ready Works announces that four persons are richer by \$3,000. The combination of letters which is destined to replace the old term "flashlight" is "Daylo," and was sent in individually by Mrs. F. G. Grow, Watertown, S. C.; Katherine W. Hand, Topeka, Kan.; Miss J. M. Schulz, Union Hill, N. J., and Bertha A. Wilson, Medina, N. Y. According to the company's agreement, a check for the full amount of the prize offer was mailed to each of the fortunate ladies.

"Daylo," says the company's statement of the prize award, "is indeed easy to remember and pronounce. In fact, it cannot be mispronounced and its elements do suggest the maker and use of Ever Ready. "Day" suggests a perfect light and "Lo" means "behold—see." Announcement copy will be sent to every newspaper that co-operated with the company in marshalling the dealers in the advertising drive which preceded the campaign last fall. A large colored window poster has been distributed by the company for use in dealers' windows. This shows a reproduction of the check for \$3,000 over which is drawn a large red question mark and the reader is invited "to come in and see who won." Within the store, the inquirer will find a poster giving the names of the winners and details of the contest, and the electrical storekeeper will have an excellent opportunity to interest a large number of people in the electric flashlight—or more correctly speaking—in the "Ever Ready Daylo." All new goods will carry the new name, and the firm's advertising copy for May is now being amended in order to feature the new title.

W. P. Jones, formerly new-business manager of the Oklahoma Gas & Electric Company of Oklahoma City, is now manager of the company's office at Norman, Okla.



Here is a characteristic picture of J. Robert Crouse who is concerned with lamps in Cleveland and all other towns and cities. This picture was snapshotted at Walden Woods, Mr. Crouse's summer camp, and J. Robert, as you see, can toe the mark, no matter how perilous the position, and does it gracefully the while.

Cleveland Electrical League Honors J. Robert Crouse

J. Robert Crouse has been honored with the first perpetual honorary membership awarded by the Electrical League of Cleveland. When at a recent meeting F. R. Du Guay's motion to elect Mr. Crouse was promptly seconded by M. H. Moffett and confirmed unanimously the honored guest was taken completely by surprise. William Ganson Rose, secretary of the City

Planning Commission, gave a talk on the excellent work Mr. Crouse has done for the electrical industry and closed with the following metric eloquence:

In the earlier cycle of industry's race,
When team-work was lacking and slow
was the pace,
Men knew that their selfishness put
them to shame,
They knew that they needed new rules
for the game;
'Twas the man with a vision who showed
them the way,
'Tis the man with that vision we honor
to-day.

What the California Contractors Think of "Bill" Goodwin

Following is a copy of a resolution engrossed and forwarded to W. L. Goodwin formerly vice-president and general manager of the Pacific States Electric Company, San Francisco, when he left the Pacific Coast for new duties in the East, as recently announced in these columns:

Whereas, from out of the East has come a call to California for another of her sons—as big as her mountains, in heart; as productive as her mighty falls, in mind; as genial as her sun-kissed valleys, in character and

Whereas, This son, our co-operator, co-worker, friend and guide, W. L. Goodwin, has seen fit to travel from West to East, in answer to this summons, and

Whereas, This association being deep-



Here is C. R. Winston of Richmond, commercial manager of the Virginia Railway & Power Company, and some fish. But these are not ordinary fish. He caught them in the Cowpasture River, near Richmond, from a canvas boat made on a motor-driven sewing machine, and the fish were just dying to get into it.

ly appreciative of his untiring efforts, continuous work and self-sacrifices in behalf of our California Association and the betterment of conditions generally, in the electrical industry of the whole Pacific Coast, be it and the same is hereby

Resolved, That the California Association of Electrical Contractors and Dealers does by this means convey to W. L. Goodwin, thanks for his past efforts and the hearty good wishes of its members for his success in the new fields assigned him.

H. C. REID,
M. L. SCOBY,
M. F. NAGLE,
J. GENSLER,
L. F. YODALL,
W. E. HAYES,
C. V. SCHNEIDER,
Executive Committee

FRANK J. SOMERS
President
JAS. W. REDPATH
Secretary

Electric-Range Experts Get Together at Pittsfield, Mass., to Talk Over Kilowatts and Calories

During the conference of General Electric electric range salesmen held at the Pittsfield, Mass., works of the General Electric Company, March 12 to 15, a series of instructive meetings was conducted by J. D. A. Cross, in charge of heating device sales, to interchange ideas between the factory office men and the visiting range specialists. Design problems, costs, production and shipments, advertising and publications, sales methods and policies were among the topics given careful consideration. Much enthusiasm was in evidence at the meetings and every participant was very optimistic regarding the future.

The conference was held at an opportune time, as it enabled the visiting salesmen to attend both addresses delivered by Samuel Insull, president of the Commonwealth Edison Company of Chicago, at the dinners of the A. I. E. E. and the Pittsfield Board of Trade. Among those shown in the picture are A. K. Baylor and J. D. A. Cross, Pittsfield, Mass.; Hartwell Jalonick, Dallas, Tex.; J. F. Killeen, Albany, N. Y.; D. G. Brokaw, Boston, Mass.; C. O. Hard, St. Louis, Mo.; H. E. Johnson, Chicago; H. Logan, Milwaukee, Wis.; F. T. Pawling, New York; W. H. Rue, Philadelphia, Pa.; H. H. Russell, Dallas, Tex.; J. L. Shroyer, Boston, Mass.; R. W. Turnbull, Portland, Ore., and M. J. Verdery, Jr., San Francisco, Cal.





Al DeVeau, whom everybody knows, is one of the champion swimmers in all fair Brooklyn. He holds a record for swimming under water the longest time without coming to the surface for air, and another record in having been thirty-five years in the electrical business—both being eloquent testimony of his fearlessness and endurance.

Al S. DeVeau, former president of the DeVeau Telephone Manufacturing Company, has been appointed as secretary and director of factory sales in the Stanley & Patterson organization, which will hereafter manufacture DeVeau telephone apparatus and electrical specialties in its new factory at West and Hubert Streets, New York City. As most readers of ELECTRICAL MERCHANDISING know, Mr. DeVeau has been prominently connected with the electrical industry for more than thirty-five years, and has long been a familiar figure at meetings of the electrical jobbers' and contractors' associations, having attended every convention of the latter organization with the exception of the meeting at Chattanooga. Mr. DeVeau began his career with the J. H. Bunnell Company, the Western Electric Company

and the Pearce-Jones Company about 1888, and organized the DeVeau Telephone Manufacturing Company in 1892.

C. W. Forbrich has resigned as Western manager of the *Electrical Review and Western Electrician*, a position he has held since 1908, to enter the advertising field on his own account, a plan which he has had under consideration for some time. Mr. Forbrich is probably the oldest electrical newspaper advertising man in point of service, having been in the business since March, 1888. He began as the first office boy of the old *Western Electrician*, and was secretary and treasurer of that publication for a number of years prior to its sale to the *Electrical Review* in 1908. His many friends in the Central and Western states will be interested to learn that he will continue to be identified with the electrical business, as he has formed the Forbrich-Burton Advertising Service, Inc., Monadnock Block, Chicago, whose object will be to give selling co-operation; to place trade-paper and magazine advertising, and to design and write advertising literature of all kinds for electrical, mechanical and other manufacturers.

At a meeting of the directors of the Frank H. Stewart Electric Company of Philadelphia, Pa., some changes were made in the personnel of the firm, which now stands as follows: Frank H. Stewart, president; W. Burnett Stewart, vice-president; Frank E. Hacker, secretary; Lewis M. Creighton, treasurer; William T. Walker, general manager, and Samuel Boardman, sales manager.

W. S. Rugg, formerly district manager of the New York office of the Westinghouse Electric & Manufacturing Company, has succeeded C. S. Cook as manager of the railway department, with headquarters at East



This is "Hot-Wire" Heidrich—being H. C. Heidrich, Jersey Jovian statesman and contractor in Newark, who still prefers the old reliable shovel rather than smothering the snow by radiating his pent-up potential.

Pittsburgh, Pa. Mr. Rugg's connection with the Westinghouse company dates back to the early days when the company had its plant at Garrison Alley, Pittsburgh. Later he was transferred to the Chicago office, and in 1901 he went to the New York office as special engineer, becoming district manager of the New York office eight years later.

W. J. Doherty has incorporated his business at 618 West Jackson Boulevard, Chicago, which will hereafter be conducted under the new name of the Doherty-Hafner Company, at the present address. Henry G. Hafner, who joins Mr. Doherty in the new corporation, has been connected with the Central Electric Company for the last ten years. The concerns which this agency will represent are: Stanley & Patterson, New York City; V. V. Fittings Company, Philadelphia; McGill Manufacturing Company, Valparaiso, Ind.; Eck Dynamo Motor Company, Belleville, N. J.; Thomas & Betts Company, New York City; Central Tube Company, Pittsburgh, Pa., and A. B. Wilson Company, Cleveland, Ohio.



"It'll be a cold day when they get that crowd together," remarked a member of the Minnesota Electrical Association when he read the notice of the March meeting, and darn'it wasn't! But even "thirty below" failed to cast its accustomed chill over St. Paul with this



H. N. McConnell, commercial manager of the United Gas & Electric Corporation, during the years when he was stellar salesman with the various U. G. & E. utilities, became so expert in the demonstration of the gas and electric range that he never took his eyes off the pretty prospect—and the abit lingers.

E. Burt Fenton, for the past two years publicity manager of W. S. Barstow & Company, New York City, has severed his connection with that organization. Mr. Fenton joined the Barstow interests through the Sandusky (Ohio) Gas & Electric Company, for which he conducted the publicity work of two municipal-ownership campaigns and prepared a series of good-will advertising articles which attracted wide attention. He was the author of the papers "Snuggling Up to John Smith" dealing with public relations in general, and "The Missing Link" dealing with the question of municipal ownership, both of which, when presented before the convention of the Ohio Electric Light Association, attracted wide attention. Mr. Fenton was formerly connected with newspapers in Pittsburgh, Pa., Columbus, Toledo and Zanesville, Ohio, and was for some years editor of the Sandusky *Star-Journal*, resigning to join the Sandusky central-station organization.

L. LeRoy Gritzan has organized the Mardelva Electric & Engineering Company of Dover, Del., to conduct a general electrical contracting and engineering business throughout Delaware and parts of Maryland and Virginia. Mr. Gritzan, who was formerly a member of the commercial department of the Consolidated Gas, Electric Light & Power Company of Baltimore, Md., becomes president and general manager of the new company which has been incorporated under the laws of Delaware with a capital stock of \$150,000. Mr. Gritzan's company will specialize in Delco-light small isolated-plant work in rural communities and will also open an up-to-date electric shop and showroom at Dover where lighting fixtures, supplies, accessories and appliances will be handled.

L. L. Hirsch, who has served for the past four years as vice-president of the Electrical Supply Company of New Orleans, La., has been appointed general manager of the company, and has assumed active charge of its management. Mr. Jumonville, who was formerly active head, has disposed of his interests in the company, and has retired. Although the company has shown rapid growth since the founding of the business, it intends to devote additional energy to its sales division, and expects to show even greater results in the future.

The A. C. Gilbert Company of New Haven, Conn., makers of Polar Cub fans, "Erector" and electrical sets of parts for various toy assemblies, etc., has purchased the Maxim Munitions Corporation plant, which will be occupied in addition to its present quarters which adjoin the newly acquired property. Besides its regular line of toys the Gilbert Company is now making a wireless set for boys with



Stop—Speak not of the warm blood of the South without including mention of a man so warm-hearted he can dress a la Galveston, though he lives in Duluth. Meet this gentleman from the 40-deg.-below-zero town. He is A. W. Lindgren, manager of the Northern Electric Company of the Zenith City of the Unsalted Seas.

which they can send and receive messages over short distances.

The Homestead Electrical Supply Company has opened a store at Homestead, Fla., and will engage in electrical contracting and the sale of electrical supplies, fixtures and storage batteries. The company would like to receive catalogs from electrical manufacturers.

Robert Thistlewhite, recently of the New York Electrical School but formerly connected with the contracting and maintenance firm of G. M. Warner, for whom he acted as superintendent for many years, has accepted a position to take charge of the illumination and jobbing department of Renard & Stary of Los Angeles, Cal. Mr. Thistlewhite was appointed because of his many years' experience in contracting and illuminating work to write and put into operation the course of interior lighting and power wiring for the New York Electrical School, which he has recently completed.



bunch in session, and pep was rampant, promiscuous and contagious. One of the reasons might have been the fact that there were two and a quarter salesmen to every central-station man at the meeting. Puzzle: In the picture find President Fred Otto from Albert Lea.

The Standard Electric Service Company, Minneapolis, Minn., has succeeded to the business formerly operated as a partnership by Fred G. Dustin and Charles W. Arrick under the name of the Standard Electric Company at 239 Plymouth Building, Minneapolis. The new corporation has Fred G. Dustin, Charles W. Arrick and Emil Anderson as its incorporators. The Standard Electric Service Company has just issued to its friends and customers a handy little pocket memorandum book containing spaces for names and addresses, appointments, the 1917 Minneapolis baseball schedule and interesting facts concerning the cost of operating electrical appliances.

The Dixie Device Corporation of 120 Liberty Street, New York City, has purchased the entire vibrator business of the Rubes Electric Devices of Brooklyn, N. Y., and will continue to market the same line of electro-magnetic vibrators hitherto sold by the Rubes Company.

L. P. Perry has been appointed general manager of the newly organized Central Connecticut Power & Light Company with headquarters at Easthampton, Conn. The new company succeeds the East Haddam Electric Light Company and the Colchester Electric Light Company which have been consolidated. Arthur B. Lisle is president of the Central Connecticut Company.



While Edward D. O'Dea was diverting himself at Palm Beach this winter, he went up 2643 ft. in an aeroplane, hoping to see over and beyond the rising prices of appliances and so make himself a better department manager for the Buffalo General Electric Company. But it couldn't be done.

Harry Pickardt is operating a sales agency for lighting material with offices at 98 Park Place, New York City. He is now Eastern sales representative for the National Metal Spinning & Manufacturing Company



A snowy April like the first half of this 1917 sample, enables Will Vidor to pursue his favorite winter sport well into what used to be spring. And here we see William, who now sells electrical supplies right on Fifth Avenue, Manhattan, as he used to look chauffeuring his twin-six Robert-sled down the glassy slopes of the Matterhorn.

of Newark, N. J., Rush Brothers Company of Chicago, Ill., and the Utility Shade Company of Tenafly, N. J. In addition Mr. Pickardt is representing the Faries Manufacturing Company of Decatur, Ill., in the Greater New York territory.

L. R. W. Allison, for the last five years connected with the Rice Electric Display Company, New York City, operating the Rice Leaders of the World Association, and identified with the sales, advertising, promotion and management of that organization, has resigned, with the intention of engaging independently in electrical and technical writing and research work at Newark, N. J.

The Bruger Company, 53 West Twenty-third Street, New York City, has taken over the selling agency for the Mystic window-display device formerly sold by the New Method Advertising Corporation, 47 West Thirty-fourth Street, New York City.

The Gas and Electric Sales Company of San Francisco, Cal., announces that the construction of their building at Powell and Sutter Streets, adjoining the headquarters of the Pacific Gas & Electric Company, is progressing rapidly. The firm plans to deal in electric lighting and heating devices on a large scale and will have 115 ft. show window frontage on Sutter Street and 137 ft. on Powell Street for display purposes. The temporary address of the company is 435 Powell Street, San Francisco.

Mayr Aronson of the firm of Shapiro & Aronson, manufacturers of lighting fixtures, 20 Warren Street, New York, died at New York on March 12.

George C. Knott has resigned as sales and advertising manager of the Wirt Company, Philadelphia, and formed a partnership with George L. Hatheway. The new company will be known as Hatheway & Knott, with offices at 120 Liberty Street, New York, and will engage in the distribution of products of various electrical manufacturers. Mr. Knott was for many years associated with the Benjamin Electric Manufacturing Company and Mr. Hatheway was formerly with Pass & Seymour. In the United States they will act as general sales agents for R. M. C. Conduit Fittings, etc., and Eade Chain Insulators; in New York and Eastern territory, for Wirt Dim-alites, Killark Electric Manufacturing Company products and others. They will also maintain a Canadian connection, representing throughout the Dominion the Manhattan Electrical Supply Company, Steel City Electric Company, Killark Electric Company, Capital Porcelain Manufacturing Company, Eastern Flexible Conduit Company and National Electric Porcelain Company and other American manufacturers.



Those were the happy days, when W. F. Parker, now sales manager for the Packard Electric Company, could combine business with pleasure as he beat up the brush in the Middle Western territory. His "gunning" mate on this particular expedition was Clarence S. Macey, who, aside from being a successful duck hunter, is president of the Adel (Iowa) Light & Power Company, and was fullback on the University of Iowa football team that "cleaned" the Middle West in 1901.